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ABSTRACT

Results of a survey of 1983 Pennsylvania college graduates are presented. A total of 42,823 graduates of 127 Pennsylvania institutions were surveyed (about 71 percent of graduates at all degree levels). Statistical tables and narrative explanations cover graduates of the following programs: associate, baccalaureate, master's, doctoral, and first-professional. Attention is directed to proportions of graduates in each degree field and level that are: (1) employed in the field of preparation, (2) employed in another field, (3) employed in Pennsylvania, (4) employed part-time, (5) unemployed, (6) in military service, (7) seeking an advanced degree, or (8) engaged in some other activities. Data and detailed analysis of selected degree disciplines at each level are included. Differences in postgraduation activities are also identified by institutional type: state colleges and universities, state-related, state-aided, private colleges, community colleges, and proprietary schools. Information on the sampling adequacy of the study group is included, along with definitions for each of the 50 two-digit level categories of the Classification of Instructional Programs code that have been used, for the first time, in this report. (SW)

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Postgraduation Activities:

All Degree Levels In Pennsylvania

1983

Pennsylvania Department of Education

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I. SUMMARY

Purpose

This study examines the postgraduate activities of 1983 graduates at all degree levels. The study answers such questions as:

---- How many graduates were employed? How many graduates were employed in jobs unrelated to their degree? Employed part-time? Unemployed? In military service? Pursuing an advanced degree? Engaged in other activities and therefore not seeking employment?

---- How many employed graduates held full-time jobs in Pennsylvania related to their degree field? How many of these positions were outside of Pennsylvania?

---- How many employed graduates held full-time jobs in Pennsylvania that were unrelated to their degree field? How many of these positions were outside of Pennsylvania?

---- What was the relative employment success for graduates in each of fifty possible major disciplines at each degree level? For selected degree fields within the major disciplines?

---- What changes have there been in degree-related and Pennsylvania full-time employment and in other postgraduate activities during recent years with regard to each type of degree? Each major degree field?

Procedures

This report is based upon information provided by 127 cooperating institutions of higher education in Pennsylvania via an annual survey questionnaire that is mailed out to the reporting institutions in the Fall of the year of graduation. The survey instruments are designed to elicit information on the postgraduate activities of 1983 graduates at each degree level, i.e., associate, baccalaureate, master's, doctoral and first-professional. The data reported by these institutions were gathered by whatever means the responding institution had at its disposal (placement records, mailout questionnaires, etc.) and included data on the number of 1983 graduates for whom data had not been available.

These 127 cooperating institutions constituted 76 percent of the 167 institutions contacted and provided data on 42,823 (71%) of 60,304 1983 degree recipients from these institutions. Thirteen (92.9%) of the fourteen state system universities responded, four (100%) of the state-related universities responded, ten (83.3%) of the state-aided colleges and universities responded, fifty-one (66.2%) of the private independent colleges and universities responded, twelve (85.7%) of the fourteen community colleges responded and thirty-six (80%) of the proprietary institutions responded. The State School of Technology also provided data.

The percentage of students for whom data was available varied with the level of the degree awarded. Data was provided for 72.8 percent of the associate degree graduates of the 127 cooperating institutions, 70.1 percent of the baccalaureate degree graduates, 59.1 percent of the master's degree graduates, 47.8 percent of the doctoral degree graduates, and 92.6 percent of the first-professional degree graduates of these institutions.

A major change in the data to be reported was in terms of the degree field classification system utilized in the survey forms. In prior years, the survey forms asked for postgraduate activity data for degree fields according to the four-digit Higher Education General Information Survey (HEGIS) coding system. The federal government has, however, recently implemented a new six-digit Classification of Instructional Programs (CIP) coding system. This CIP code had become the official classification system used by all Pennsylvania institutions of higher education by the time the 1983 graduate survey was carried out.

Results

Compared with 1982, the full-time employment ratio for baccalaureate degree graduates had decreased from 62.9 percent to 61.7 percent, with a concomitant rise in part-time employment from 5.4 percent in 1982 to 6.7 percent in 1983. There was, however, a decrease in unemployment from 14.3 percent to 13.1 percent. The proportion of full-time employed graduates who were also employed in a degree-related position rose slightly from 80.4 percent to 80.6 percent. This continued a trend for baccalaureate graduates, when hired, to increasingly find full-time positions in an occupation related to their degree. With regard to the degree to which the full-time employed graduates were also employed in Pennsylvania, the baccalaureate graduates continued the pattern of increased out-of-state employment by moving from 66.0 percent employed in Pennsylvania in 1982 to 64.9 percent in 1983, in contrast with 69.6 percent in 1977.

Associate degree graduates did not experience a decline in full-time employment, compared with 1982, moving from 61.3 percent full-time employed to 65.3 percent full-time employed. This still represents an overall decline from a high in 1979 of 71.5 percent. There was also in 1983, a drop in the proportion finding part-time employment, from 5.7 percent in 1982 to 4.7 percent in 1983, and the proportion of unemployed graduates dropped from 12.1 percent in 1982 to 10.8 percent. Here again, the proportion of the full-time employed associate degree graduates who found degree-related employment rose, i.e., from 84.9 percent in 1982 to 86.2 percent in 1983 which is, however, somewhat lower than the figure of 87.4 percent for 1977. The proportion of full-time employed associate degree graduates finding employment in Pennsylvania also rose from 84.2 percent in 1982 to 88.7 percent in 1983.

The above findings suggest not only that the associate degree and the baccalaureate degree graduates had been impacted by the nationwide economic recession of that period but also that the effects of that recession were beginning to lessen by 1983.

In terms of specific discipline areas, full-time degree-related employment at the baccalaureate level for those who entered the labor market was highest for graduates in the health professions (88.8 percent), in Library Science

(79.3 percent), in Mathematics (75.8 percent), in Engineering (71.1 percent), and in the Computer and Information Sciences (70.9 percent).

The lowest rates of degree-related, full-time baccalaureate (1983) graduate employment were observed for those graduates in Area Studies (15.8 percent), Foreign Languages (33.6 percent), Social Sciences (41.4 percent), Letters (43.3 percent) and Communications (44.5 percent) who had sought employment in the civilian labor market.

In terms of specific discipline areas at the associate degree level, the following disciplines had the highest rates of full-time, degree-related employment when their graduates sought employment: graduates in the Health Sciences (90.2 percent), in Marketing and Distribution (84.4 percent), in the Mechanics and Repair Disciplines (80.5) percent), in Library and Archival Science (77.8 percent), in the Physical Science Technologies (74.5 percent), in Precision Production (72.5 percent), and in the Construction Trades (69.4 percent). The low rated associate degree disciplines with regard to full-time, degree related employment in the Civilian Labor Market were: Mathematics (0.0 percent), Parks and Recreation (11.1 percent), Multi/Interdisciplinary Studies (17.6 percent), Life Sciences (18.2 percent), the Visual and Performing Arts (28.6 percent), Renewable Natural Resources (34.9 percent), and Liberal and General Studies (38.6 percent).

In terms of graduates in the field of Education at the baccalaureate level, the highest rates of full-time, degree-related employment for those who entered the Civilian Labor Market were for graduates in Trade and Industrial Education (100.0 percent), Physics and Mathematics Education (100.0 percent), Dental Hygiene Education (100.0 percent), Teaching English as a Second/Foreign Language (100.0 percent), Nursing Education (96.1 percent), Mathematics Education (82.7 percent), Education of the Visually Handicapped (78.9 percent), Education of the Deaf and Hearing Impaired (77.8 percent), Education of the Mentally Handicapped (75.0 percent) and Education of the Multiple Handicapped (72.8 percent).

The low ranked education disciplines in terms of full-time, degree-related Civilian Labor Market employment were: Physical Education and Sports Education (0.0 percent), Environmental Education (0.0 percent), Social Studies Education (29.5 percent), Foreign Language Education (30.0 percent), Physical Education (30.1 percent), Health, Physical and Recreational Education (32.9 percent), Art Education (39.8 percent), Marketing and Distributive Education (40.0 percent), English Education (48.4 percent), and Social Science Education (50.0 percent).

As can be seen in the Table on page four, the associate degree graduates of 1983 were about equally successful in obtaining full-time employment compared with 1977 (63.0 to 65.3%) and somewhat less successful in obtaining degree-related employment (87.2 to 86.2%). There was also a slight increase in the proportion of full-time employed graduates finding employment in Pennsylvania compared with 1977 (84.2 to 88.7%) in spite of an observed decline in full-time employment and Pennsylvania based employment between 1982 and 83. Even more striking is the decline in the proportion going on to pursue an advanced degree (27.6 to 16.1%).

The bachelor's degree graduates had about the same rate of full-time employment in 1983 as they had in 1977 (62.0 to 61.7%) but less Pennsylvania

based employment (69.6 to 64.9%). There was, however, an increase in the rate of degree-related employment from 1977 to 1983 (75.5 to 80.6%) despite the decline in full-time, degree-related employment from 1982 to 1983 caused by the recent economic recession.

	Comparison Of Postgraduation Activities								Full-Time Employed			
	Full-Time Employed		Part-Time Employed		Un-employed		Advanced Degree		In Field Prepared		Employed In Pa.	
Level	1977	1983	1977	1983	1977	1983	1977	1983	1977	1983	1977	1983
Associate	63.0	65.3	4.5	4.7	4.5	10.8	27.6	16.1	87.2	86.2	84.2	88.7
Bachelor's	62.0	61.7	5.8	6.7	15.9	13.1	16.3	15.6	75.5	80.6	69.6	64.9
Master's	81.0	74.5	2.0	2.5	7.3	6.0	9.7	14.6	90.5	86.9	75.7	66.6
Doctoral	90.8	87.0	3.6	4.7	4.2	5.8	1.4	1.8	90.3	91.7	57.0	40.7
First-Prof.	91.9	81.1	0.5	1.4	2.2	1.7	5.4	8.6	96.4	95.2	57.1	57.4

The master's degree graduates had a pattern of decline in full-time employment between 1977 and 1983 (81.0 to 74.5%) and in Pennsylvania based employment (75.7 to 66.6%). There was also a decline in the rate of degree-related employment between 1977 and 1983 (90.5 to 86.9%).

The doctoral degree graduates also experienced a decline in the rates of full-time employment (90.8 to 87.0%) and Pennsylvania based employment (57.0 to 40.7%) between 1977 and 1983. In addition, the rate of degree-related employment fell during this period (90.3 to 91.7%).

The first-professional graduates had an overall decline in the rate of full-time employment (91.9 to 81.1%) and a slight drop in the rate of degree-related employment from 96.4 percent in 1977 to 95.2 percent in 1983. The rate of Pennsylvania based employment for these graduates remained approximately the same during this period (57.1 to 57.4%).

In effect, the recent economic recession plus a possible decline in demand for legal and dental professionals has resulted in a general pattern of decline rather than growth in the rate of full-time employment for graduates with the exception of those with associate and bachelor's degree relative to 1977 despite the improvement that had occurred up to 1979-80. In terms of the proportion of the full-time employed who had found degree-related employment, the associate degree graduates had declined slightly from 86.2 percent in 1983 from 87.2 percent in 1977, those with a master's degree declined from 90.5 percent in 1977 to 86.9 percent in 1983 and the first-professionals from 96.4 percent in 1977 to 95.2 percent in 1983. Only the bachelor's degree graduates were finding degree-related employment more often in 1983 (80.6%) than in 1977 (75.5%) when they obtained full-time employment. With the exception of the first-professional graduates and the associate degree graduates there has been a decline in the rate of Pennsylvania based employment compared with the year 1977. In addition, the associate degree graduates seem to be increasingly more likely to enter into employment rather than move on to a higher degree possibly due to an increased emphasis upon vocationally oriented education at this level of instruction.

II. INTRODUCTION

The employment success of higher education graduates is of interest to higher education administrators, especially in times of financial inflation, economic downturn, and dwindling enrollments. Authorized by the Office of Higher Education of the Pennsylvania Department of Education, this report is the eleventh in a series of reports designed to supply information useful to students, counselors, administrators, legislators, and educational planners.

III. HISTORY

This series of reports began as an outcome of a 1972 study commissioned by the Pennsylvania Department of Education and carried out by Dr. William Toombs of the Center for the Study of Higher Education at the Pennsylvania State University. Dr. Toombs' report on the postgraduate activities of the baccalaureate graduates of 1971-72, from 72 degree granting institutions of higher education in Pennsylvania, was so well received and so useful that a decision was made to institute an annual survey of the postgraduate activities of baccalaureate graduates. These annual surveys were to be conducted by the research staff of the Pennsylvania Department of Education.

The first annual survey conducted by the Department of Education was carried out in 1974 using information from the baccalaureate graduates of 1973-74. This survey involved a direct mailing of survey forms to the graduates of 1973-74 utilizing an 18-item, prepaid, postcard return form. Cooperation was received from 86 of 102 institutions. Altogether, 49.3 percent of all graduates of the 86 cooperating institutions responded. This report, indicated that 14.6 percent of the baccalaureate graduates were still seeking employment by late fall of 1974 and that full-time employment had been obtained by 62.3 percent of these graduates. Of the full-time employed graduates, 38.1 percent were found to have jobs that were "highly related" to their degree and 10.1 percent reported that they had "somewhat related" positions. Seventy-four point seven percent of the full-time employed graduates of 1974 reported that they were employed in Pennsylvania.

Continued direct mailing of postcard return forms to the graduates was found to be too formidable a task, given the resources of the Department of Education. As a consequence, a format very similar to that now used was then developed. The placement officer, or other designated responsible officer, of each higher education institution that agreed to cooperate was to provide basic, agreed upon, information that could be used to compile an annual report. Each institution was to utilize the methodology that it felt was most suitable, or practicable, in light of its own needs and limitations. One important change was made; the coverage was expanded to include graduates at all degree levels.

The first in this new series of reports began with the graduates of 1974-75 using data provided by the designated officials of 117 Pennsylvania higher education institutions. Data was made available for 36,026 graduates at

all degree levels, representing approximately 40 percent of all Pennsylvania graduates and 66 percent of the graduates of the cooperating institutions.

In that year (1975), 86.9 percent of the associate, 73.6 percent of the baccalaureate, 87.6 percent of the master's, 91.9 percent of the doctoral, and 95.3 percent of the first-professional degree full-time employed graduates were found to have obtained degree-related employment compared with 1983 graduate figures of 86.2 percent for the associate, 80.6 percent for the baccalaureate, 86.9 percent for the master's, 91.7 percent for the doctoral and 95.2 percent for the first-professional degree graduates.

IV. PROCEDURES

Objectives

Answers to the following questions were sought. What proportion of reported 1983 graduates in each degree field, at each degree level, were: (1) employed full-time in their field of preparation, (2) employed full-time in a position other than that for which they were prepared, (3) employed full-time in Pennsylvania, (4) employed part-time, (5) unemployed, (6) in military service, (7) seeking an advanced degree, or (8) engaged in some other activity, i.e., not seeking employment? In addition, the answers to the following questions were sought. What proportion of the 1983 graduates in each degree field at each degree level who remained in the civilian labor market were: (1) employed full-time in their field of preparation, (2) employed full-time in a position other than that for which they were prepared, (3) employed full-time in Pennsylvania, (4) employed part-time, or (5) unemployed? How do the answers to these questions compare with those for 1982, or to those for prior years.

Methodology:

The subjects of this study were those who graduated between January 1983 and August 1983 from the 127 institutions of higher education who had provided data on their graduates. Useable data were received for 42,823 (71%) of the 60,304 individuals reported as having graduated during this period from these reporting institutions. In the fall of 1983, survey forms were sent to contact persons in each postsecondary institution that had provided data in prior years. These contact persons were usually career services officers appointed by their institutions to cooperate in this study.

Data collection methods used by the institutions varied with the institution. For example, one college surveys continuously by including a survey card with the employment opening lists that are sent periodically to its graduates. Upon employment, these graduates are asked to complete and return the card. Another institution surveys its graduates at intervals, such as December graduates in March, May graduates in August, and August graduates in September. Other institutions survey all of their graduates around mid-November - with an intensive follow-up by phone in December of nonrespondents. In February intensive follow-up procedures are also initiated by the Department of Education to obtain information from institutions that did not return their survey forms to the Department of Education by the deadline date of February 1.

A major change in the methodology used in this series of reports was the switchover from the four-digit Higher Education General Information Survey (HEGIS) codes used in prior reports to the more detailed six-digit Classification of Instructional Programs (CIP) codes that were formally adopted by the federal government and made effective for all Pennsylvania institutions as of July 1, 1984.

While the new six-digit CIP codes permitted a more detailed description of degree-field programs, they also presented a problem of continuity with the previous reports. This report, being the first under the new CIP code system, therefore deals less with time trends and breaks out the data in a different manner than before. The last section of this report, however, does attempt to present data over time for the degree fields categorized in past reports. This was found to be possible for the baccalaureate and higher degrees due to the fairly clearcut continuation of older HEGIS degree-field categories in the new CIP system. In the case of the associate degree fields, however, this proved to be impossible because of the great changes made in the classification of those degree fields traditionally associated with the associate degree.

V. SAMPLING ADEQUACY

As can been seen in Table 0.0 on the following page, the institutional response rate for this report was 76.0 percent, overall, with the independent private colleges and universities having the lowest response rate (66.2%) of any Pennsylvania higher educational sector. The report itself contains information on 42,823 graduates (71.0%) of 60,304 reported associate, baccalaureate, master's, doctoral, and first-professional graduates who graduated in 1983 from 127 cooperating institutions.

In terms of the degree to which the 127 responding institutions were representative of all such institutions, Table 0.0 indicates that the responding institutions constituted 69.8 percent of all such institutions in Pennsylvania. Here again, the independent private colleges and universities were least well represented (62.2%) of the sampled institutional sectors.

As can be seen in Table 0.1, the adequacy of the returns also varied with the type of degree, i.e., from 47.8 percent for master's degree graduates to 92.6 percent for the first-professional degree graduates. In Table 0.2, it is apparent that the adequacy of the returns also varied with the type of institution, i.e., from 50.0 percent for the Thaddeus Stevens State School of Technology to 94.6 percent for the proprietary institutions.

In several prior studies in this series of reports no significant differences were found between first-round respondents and non-responding graduates when a follow-up study of the latter was made. Since the present study is similar to its predecessors, the sampling of the respondents is believed likely to be reasonably reflective of all graduates wherever the samples are large relative to all of the graduates in a given response category, e.g., degree field or major discipline.

TABLE 0.0

1983 POSTGRADUATE ACTIVITY SURVEY RESPONSE RATES
AND INSTITUTIONAL SAMPLING RATES BY
TYPE OF INSTITUTION

INSTITUTIONAL TYPE	INSTITUTIONS RESPONDING TO SURVEY	INSTITUTIONS CONTACTED	TOTAL PENNSYLVANIA INSTITUTIONS	INSTITUTIONAL RESPONSE RATE	INSTITUTIONAL SAMPLE SIZE
	#	#	#	(%)	(%)
State System	13	14	14	92.9	92.9
State-Related	4	4	4	100.0	100.0
State-Aided	10	12	12	83.3	83.3
Independent Private	51	77	82	66.2	62.2
Community Colleges	12	14	14	85.7	85.7
Proprietary Schools	36	45	55	80.0	65.5
State School of Technology[1]	1	1	1	100.0	100.0
TOTAL	127	167	182	76.0	69.8

[1]Thaddeus Stevens State School of Technology

Table 0.3 indicates the degree of sampling adequacy for associate degree graduates at the two-digit CIP Code level. Table 0.4 then gives the degree of sampling adequacy of data provided by each institutional sector, at each degree level above the associate degree, while Table 0.5 does so for each of the basic two-digit (CIP) degree field categories utilized in this report.

In sum, the overall picture is one of an adequate sampling of the basic CIP two-digit level degree field categories with the adequacy of the sampling varying somewhat with the type of responding institution and the degree level in question.

TABLE 0.1

NUMBER OF RETURNS BY TYPE OF DEGREE FOR 1983 GRADUATES
COMPARED WITH THE NUMBER GRADUATED FROM ALL
RESPONDING INSTITUTIONS IN PENNSYLVANIA

DEGREE	DEGREES AWARDED	NUMBER OF RETURNS	PERCENT OF RETURNS
Associate	16,434	11,958	72.8
Baccalaureate	36,390	25,494	70.1
Master's	3,866	2,285	59.1
Doctor's	579	277	47.8
First-Professional	3,035	2,809	92.6
TOTAL	60,304	42,823	71.0

TABLE 0.2

NUMBER OF RETURNS BY INSTITUTIONAL CATEGORY FOR ASSOCIATE DEGREE
GRADUATES COMPARED WITH THE NUMBER GRADUATED FROM ALL
RESPONDING INSTITUTIONS IN PENNSYLVANIA, 1983

INSTITUTIONAL CATEGORY	ASSOCIATE DEGREE	NUMBER OF RETURNS	PERCENT RETURNS
Colleges and Universities	3,358	2,031	60.5
Community Colleges	8,500	5,671	66.7
Proprietary Institutions	4,410	4,173	94.6
State Technology Schools	166	83	50.0
TOTAL	16,434	11,958	72.8

TABLE 0.3

NUMBER OF RETURNS BY MAJOR DISCIPLINE FOR ASSOCIATE DEGREE GRADUATES COMPARED WITH THE NUMBER GRADUATED FROM ALL RESPONDING INSTITUTIONS IN PENNSYLVANIA, 1983*

	MAJOR DISCIPLINE	ASSOCIATE DEGREES	NUMBER OF RETURNS	PERCENT RETURNS
01	Agribusiness and Agricultural Production	25	20	80.0
03	Renewable Natural Resources	110	68	61.8
04	Architecture and Environmental Design	38	35	92.1
06	Business and Management	2,180	1,325	60.8
07	Business and Office	2,593	2,118	81.7
08	Marketing and Distribution	323	251	77.7
09	Communications	77	67	87.0
10	Communications Technologies	86	58	67.4
11	Computer and Information Sciences	909	672	73.9
12	Consumer, Personal, and Miscellaneous Services	105	104	99.0
13	Education	206	151	73.3
14	Engineering	53	41	77.4
15	Engineering and Engineering-Related Technologies	2,907	2,242	77.1
16	Foreign Languages	2	1	50.0
17	Allied Health	1,425	1,026	72.0
18	Health Sciences	1,101	830	75.4
20	Vocational Home Economics	310	185	59.7
22	Law	61	52	85.2
23	Letters	10	6	60.0

TABLE 0.3 (Continued)

	MAJOR DISCIPLINE	ASSOCIATE DEGREES	NUMBER OF RETURNS	PERCENT RETURNS
24	Liberal/General Studies	1,202	639	53.2
25	Library and Archival Sciences	9	9	100.0
26	Life Sciences	38	22	57.9
27	Mathematics	7	7	100.0
30	Multi/Interdisciplinary Studies	65	36	55.4
31	Parks and Recreation	28	13	46.4
38	Philosophy and Religion	1	1	100.0
39	Theology	3	3	100.0
40	Physical Sciences	12	9	75.0
41	Science Technologies	88	59	67.0
42	Psychology	17	8	47.1
43	Protective Services	354	226	63.8
44	Public Affairs	40	27	67.5
45	Social Sciences	64	35	54.7
46	Construction Trades	502	336	66.9
47	Mechanics and Repairers	636	598	94.0
48	Precision Production	707	575	81.3
49	Transportation and Material Moving	51	47	92.2
50	Visual and Performing Arts	89	56	72.8
	TOTAL	16,434	11,958	72.8

*DATA FOR ONE INSTITUTION HAS NOT BEEN INCLUDED DUE TO NON-REPORT OF THE NUMBER GRADUATED

TABLE 0.4

NUMBER OF RETURNS BY TYPE OF INSTITUTION FROM GRADUATES AT FOUR DEGREE LEVELS COMPARED WITH THE NUMBER GRADUATED FROM ALL RESPONDING INSTITUTIONS IN PENNSYLVANIA, 1983

INSTITUTIONAL CATEGORY		ALL GRAD	ALL RETRN	BACL GRAD	BACL RETRN	MSTR GRAD	MSTR RETRN	DCTR GRAD	DCTR RETRN	1ST PRF GRAD	1ST PRF RETRN
Private Colleges and Universities[1]	#	17,264	13,311	15,746	12,154	1,192	894	121	90	205	173
	%		77.1		77.2		75.0		74.4		84.4
State System of Higher Education	#	11,923	8,248	10,691	7,514	1,223	730	9	4	0	0
	%		69.2		70.3		59.7		44.4		.0
State-Aided	#	2,460	2,227	710	577	101	101	35	35	1,614	1,514
	%		90.5		81.3		100.0		100.0		93.8
State-Related	#	12,223	7,079	9,243	5,249	1,350	560	414	148	1,216	1,122
	%		57.9		56.8		41.5		35.7		92.3
TOTAL		43,870	30,865	36,390	25,494	3,866	2,285	579	277	3,035	2,809
			70.4		70.1		59.1		47.8		92.6

[1]DATA FOR 34 GRADUATES HAVE NOT BEEN INCLUDED DUE TO NON-REPORT OF THE NUMBER GRADUATED.

TABLE 0.5

NUMBER OF RETURNS BY MAJOR DISCIPLINE FROM GRADUATES AT FOUR DEGREE LEVELS COMPARED WITH THE NUMBER GRADUATED FROM ALL RESPONDING INSTITUTIONS IN PENNSYLVANIA, 1983

	MAJOR DISCIPLINE		ALL GRAD	ALL RETRN	BACL GRAD	BACL RETRN	MSTR GRAD	MSTR RETRN	DCTR GRAD	DCTR RETRN	1ST PRF GRAD	1ST PRF RETRN
01	Agribusiness and Agricultural Production	#	124	62	110	57	14	5	0	0	0	0
		%		50.0		51.8		35.7		.0		.0
02	Agricultural Sciences	#	589	417	534	400	38	12	17	5	0	0
		%		70.8		74.9		31.6		29.4		.0
03	Renewable Natural Resources	#	188	111	167	101	19	8	2	2	0	0
		%		59.0		60.5		42.1		100.0		.0
04	Architecture and Environmental Design	#	249	157	217	140	27	15	5	2	0	0
		%		63.1		64.5		55.6		40.0		.0
05	Area and Ethnic Studies	#	55	38	42	34	13	4	0	0	0	0
		%		69.1		81.0		30.8		.0		.0
06	Business and Management	#	9,761	6,675	9,147	6,254	594	408	20	13	0	0
		%		68.4		68.4		68.7		65.0		.0
07	Business and Office	#	101	87	101	87	0	0	0	0	0	0
		%		86.1		86.1		.0		.0		.0
08	Marketing and Distribution	#	578	351	578	351	0	0	0	0	0	0
		%		60.7		60.7		.0		.0		.0
09	Communications	#	1,379	1,005	1,339	989	40	16	0	0	0	0
		%		72.9		73.9		40.0		.0		.0
10	Communications Technologies	#	23	5	23	5	0	0	0	0	0	0
		%		21.7		21.7		.0		.0		.0
11	Computer and Information Sciences	#	1,352	966	1,289	933	46	19	17	14	0	0
		%		71.4		72.4		41.3		82.4		.0

TABLE 0.5 (Continued)

	MAJOR DISCIPLINE		ALL GRAD	ALL RETRN	BACL GRAD	BACL RETRN	MSTR GRAD	MSTR RETRN	DCTR GRAD	DCTR RETRN	1ST PRF GRAD	1ST PRF RETRN
13	Education	#	5,457	3,806	4,123	3,056	1,225	704	109	46	0	0
		%		69.7		74.1		57.5		42.2		.0
14	Engineering	#	3,102	1,955	2,636	1,737	384	191	82	27	0	0
		%		63.0		65.9		49.7		32.9		.0
15	Engineering and Engineering-Related Technologies	#	412	263	383	250	24	10	5	3	0	0
		%		63.8		65.3		41.7		60.0		.0
16	Foreign Languages	#	318	208	291	193	26	15	1	0	0	0
		%		65.4		66.3		57.7		.0		.0
17	Allied Health	#	689	558	598	483	91	75	0	0	0	0
		%		81.0		80.0		82.4		.0		.0
18	Health Sciences	#	4,189	3,413	2,018	1,438	116	93	15	11	2,040	1,871
		%		81.5		71.3		80.2		73.3		91.7
19	Home Economics	#	539	373	507	359	18	7	14	7	0	0
		%		69.2		70.8		38.9		50.0		.0
20	Vocational Home Economics	#	123	99	123	99	0	0	0	0	0	0
		%		80.5		80.5		.0		.0		.0
22	Law	#	1,040	960	45	22	0	0	0	0	995	938
		%		92.3		48.9		.0		.0		94.3
23	Letters	#	1,220	769	1,088	692	95	61	37	16	0	0
		%		63.0		63.6		64.2		43.2		.0
24	Liberal/General Studies	#	276	157	271	153	5	4	0	0	0	0
		%		56.9		56.5		80.0		.0		.0
25	Library and Archival Sciences	#	59	50	31	30	28	20	0	0	0	0
		%		84.7		96.8		71.4		.0		.0

TABLE 0.5 (Continued)

	MAJOR DISCIPLINE		ALL GRAD	ALL RETRN	BACL GRAD	BACL RETRN	MSTR GRAD	MSTR RETRN	DCTR GRAD	DCTR RETRN	1ST PRF GRAD	1ST PRF RETRN
26	Life Sciences	#	1,911	1,418	1,704	1,307	136	80	71	31	0	0
		%		74.2		76.7		58.8		43.7		.0
27	Mathematics	#	531	418	461	368	58	42	12	8	0	0
		%		78.7		79.8		72.4		66.7		.0
28	Military Sciences	#	3	3	3	3	0	0	0	0	0	0
		%		100.0		100.0		.0		.0		.0
30	Multi/Interdisciplinary Studies	#	582	381	532	359	44	21	6	1	0	0
		%		65.5		67.5		47.7		16.7		.0
31	Parks and Recreation	#	105	57	88	50	14	7	3	0	0	0
		%		54.3		56.8		50.0		.0		.0
38	Philosophy and Religion	#	275	200	224	173	37	18	14	9	0	0
		%		72.7		77.2		48.6		64.3		.0
39	Theology	#	133	103	116	96	17	7	0	0	0	0
		%		77.4		82.8		41.2		.0		.0
40	Physical Sciences	#	1,238	870	1,046	771	119	67	73	32	0	0
		%		70.3		73.7		56.3		43.8		.0
41	Science Technologies	#	9	8	9	8	0	0	0	0	0	0
		%		88.9		88.9		.0		.0		.0
42	Psychology	#	1,603	1,157	1,398	1,019	168	107	37	31	0	0
		%		72.2		72.9		63.7		83.8		.0
43	Protective Services	#	664	391	657	389	7	2	0	0	0	0
		%		58.9		59.2		28.6		.0		0
44	Public Affairs	#	753	467	553	359	194	105	6	3	0	0
		%		62.0		64.9		54.1		50.0		.0

TABLE 0.5 (Continued)

	MAJOR DISCIPLINE		ALL GRAD	ALL RETRN	BACL GRAD	BACL RETRN	MSTR GRAD	MSTR RETRN	DCTR GRAD	DCTR RETRN	1ST PRF GRAD	1ST PRF RETRN
45	Social Sciences	#	2,977	2,056	2,792	1,951	159	93	26	12	0	0
		%		69.1		69.9		58.5		46.2		.0
48	Precision Production	#	33	26	33	26	0	0	0	0	0	0
		%		78.8		78.8		.0		.0		.0
50	Visual and Performing Arts	#	1,230	825	1,113	752	110	69	7	4	0	0
		%		67.1		67.6		62.7		57.1		.0
	TOTALS		43,870	30,865	36,390	25,494	3,866	2,285	579	277	3,035	2,809
				70.4		70.1		59.1		47.8		92.6

*ONE INSTITUTION'S DEGREE PROGRAMS HAVE NOT BEEN REPORTED HERE DUE TO NON-REPORT OF THE TOTAL NUMBER OF GRADUATES.

VI. ORGANIZATION OF THIS REPORT

The body of this report consists of tables and narrative concerning findings for: Associate Degree, Baccalaureate Degree, Master's Degree, Doctoral Degree, and First-Professional Degree graduates in addition to findings for the various institutional sectors.

It also provides degree field trends from 1977 to 1983 for each degree level except the associate degree using the older HEGIS categories found in prior reports. Appendix A, at the end of this report, gives definitions for each of the 50 two-digit level categories of the Classification of Instructional Programs (CIP) code that have been used, for the first time, in this report. These definitions are for the reader's use in understanding these major discipline areas.

The tables that are listed in Appendix B have been omitted from this report due to the sheer volume of information generated by the six-digit CIP code system. Those having a need for the listed appendix tables may request a copy of those tables that are relevant to their needs. It must be remembered, however, that the number of graduates sampled becomes much smaller when one moves down from the two-digit level of analysis to four- and six-digit degree-field specifications. The Appendix tables, when requested, should be very cautiously and tentatively interpreted by the user who requests them.

VII. RESULTS FOR ASSOCIATE DEGREE GRADUATES

Table 1.0, on the pages that follow, summarizes the postgraduate activity of the associate degree graduates of 1982-83 in terms of the broadest (two-digit level) Classification of Instructional Programs (CIP) categories available. A more detailed analysis of selected major disciplines from Table 1.0 is then made using a combination of the four-digit and six-digit levels of the CIP classification system.

The findings of Table 1.0 are given in terms of two separate percentage distributions that accompany the numerical counts for a given major discipline area. Numerical counts are shown for each of the postgraduate activitiy categories used in this study. The first of the two percentage distributions is simply the percentage of reported graduates in each type of activity. The second percentage distribution indicates the percentage of graduates in the Civilian Labor Market engaged in employment-related activity, i.e., those in military service, those pursuing an advanced degree, and those engaged in activity unrelated to employment were excluded.

For each of the major disciplines, the findings are given in terms of: (1) the number of graduates who found degree-related employment in Pennsylvania; (2) the number of graduates who found degree-related employment outside of Pennsylvania; (3) the number of graduates who found employment in Pennsylvania that was unrelated to their degree field; (4) the number of graduates who found employment outside of Pennsylvania that was unrelated to their degree field; (5) the number of graduates who found part-time employment; (6) the number of graduates who were unemployed and still seeking employment; (7) the number of graduates who had entered military service; (8) the number of graduates who were pursuing an advanced degree and, finally; (9) the number of graduates who were engaged in other activities, i.e., those not employed and not in graduate school but who were also not seeking employment.

When a comparison, over time, of selected measures derived from this and previous reports on the associate degree graduates of 1976-77 through 1982-83 is made, the following results are obtained:

Year	Reported Graduates	Full-Time Employed	Part-Time Employed	Un-employed	Seeking Advanced Degree	Full-Time Employed In Field Prepared	Full-Time Employed In Pa.
1977	8,589	63.0	4.5	4.5	27.6	87.2	84.2
1978	9,128	68.5	3.5	6.1	21.9	85.7	86.9
1979	8,860	71.5	2.2	4.2	21.9	87.0	84.6
1980	8,853	68.5	3.8	5.9	22.1	87.9	87.4
1981	9,993	70.2	3.5	6.6	19.7	88.2	84.5
1982	8,938	61.3	5.7	12.1	17.2	84.9	84.2
1983	11,958	65.3	4.7	10.8	16.1	86.2	88.7

These findings indicate that the associate degree graduates of 1983, like those of 1982, were impacted by the economic recession that occurred during

TABLE 1.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR ASSOCIATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
01 AGRIBUSINESS AND AGRICULTURAL PRODUCTION											
	#	20	10	0	1	0	1	5	3	0	0
	%		50.0	.0	5.0	.0	5.0	25.0	15.0	.0	.0
	%	17	58.8	.0	5.9	.0	5.9	29.4			
03 RENEWABLE NATURAL RESOURCES											
	#	68	5	10	9	1	8	10	25	0	0
	%		7.4	14.7	13.2	1.5	11.8	14.7	36.8	.0	.0
	%	43	11.6	23.3	20.9	2.3	18.6	23.3			
04 ARCHITECTURE AND ENVIRONMENTAL DESIGN											
	#	35	7	4	9	3	1	6	3	0	2
	%		20.0	11.4	25.7	8.6	2.9	17.1	8.6	.0	5.7
	%	30	23.3	13.3	30.0	10.0	3.3	20.0			
06 BUSINESS AND MANAGEMENT											
	#	1,325	529	21	163	7	77	122	379	3	24
	%		39.9	1.6	12.3	.5	5.8	9.2	28.6	.2	1.8
	%	919	57.6	2.3	17.7	.8	8.4	13.3			
07 BUSINESS AND OFFICE											
	#	2,118	1,283	59	202	6	121	181	204	3	59
	%		60.6	2.8	9.5	.3	5.7	8.5	9.6	.1	2.8
	%	1,852	69.3	3.2	10.9	.3	6.5	9.8			
08 MARKETING AND DISTRIBUTION											
	#	251	139	45	14	2	7	11	24	1	8
	%		55.4	17.9	5.6	.8	2.8	4.4	9.6	.4	3.2
	%	218	63.8	20.6	6.4	.9	3.2	5.0			
09 COMMUNICATIONS											
	#	67	29	1	12	2	6	7	8	0	2
	%		43.3	1.5	17.9	3.0	9.0	10.4	11.9	.0	3.0
	%	57	50.9	1.8	21.1	3.5	10.5	12.3			

TABLE 1.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR ASSOCIATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
10 COMMUNICATIONS TECHNOLOGIES	#	58	20	5	6	0	5	4	14	0	4
	%		34.5	8.6	10.3	.0	8.6	6.9	24.1	.0	6.9
	%	40	50.0	12.5	15.0	.0	12.5	10.0			
11 COMPUTOR AND INFORMATION SCIENCES	#	672	295	27	57	3	38	148	74	1	29
	%		43.9	4.0	8.5	.4	5.7	22.0	11.0	.1	4.3
	%	568	51.9	4.8	10.0	.5	6.7	26.1			
12 CONSUMER, PERSONAL, AND MISCELLANEOUS SERVICES	#	104	90	0	1	0	1	0	2	0	10
	%		86.5	.0	1.0	.0	1.0	.0	1.9	.0	9.6
	%	92	97.8	.0	1.1	.0	1.1	.0			
13 EDUCATION	#	151	11	1	41	0	7	7	78	0	6
	%		7.3	.7	27.2	.0	4.6	4.6	51.7	.0	4.0
	%	67	16.4	1.5	61.2	.0	10.4	10.4			
14 ENGINEERING	#	41	5	1	5	0	1	1	28	0	0
	%		12.2	2.4	12.2	.0	2.4	2.4	68.3	.0	.0
	%	13	38.5	7.7	38.5	.0	7.7	7.7			
15 ENGINEERING AND ENGINEERING-RELATED TECHNOLOGIES	#	2,242	881	309	218	16	79	392	320	19	8
	%		39.3	13.8	9.7	.7	3.5	17.5	14.3	.8	.4
	%	1,895	46.5	16.3	11.5	.8	4.2	20.7			
16 FOREIGN LANGUAGES	#	1	0	0	0	0	0	0	1	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			

TABLE 1.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR ASSOCIATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
17 ALLIED HEALTH	#	1,026	657	73	35	1	71	74	81	1	33
	%		64.0	7.1	3.4	.1	6.9	7.2	7.9	.1	3.2
	%	911	72.1	8.0	3.8	.1	7.8	8.1			
18 HEALTH SCIENCES	#	830	633	27	3	1	51	17	86	1	11
	%		76.3	3.3	.4	.1	6.1	2.0	10.4	.1	1.3
	%	732	86.5	3.7	.4	.1	7.0	2.3			
20 VOCATIONAL HOME ECONOMICS	#	185	95	4	19	1	8	15	39	0	4
	%		51.4	2.2	10.3	.5	4.3	8.1	21.1	.0	2.2
	%	142	66.9	2.8	13.4	.7	5.6	10.6			
22 LAW	#	52	29	3	6	3	3	6	1	0	1
	%		55.8	5.8	11.5	5.8	5.8	11.5	1.9	.0	1.9
	%	50	58.0	6.0	12.0	6.0	6.0	12.0			
23 LETTERS	#	6	0	0	0	0	1	0	5	0	0
	%		.0	.0	.0	.0	16.7	.0	83.3	.0	.0
	%	1	.0	.0	.0	.0	100.0	.0			
24 LIBERAL/GENERAL STUDIES	#	639	106	7	108	3	21	48	281	2	63
	%		16.6	1.1	16.9	.5	3.3	7.5	44.0	.3	9.9
	%	293	36.2	2.4	36.9	1.0	7.2	16.4			
25 LIBRARY AND ARCHIVAL SCIENCES	#	9	7	0	0	0	0	2	0	0	0
	%		77.8	.0	.0	.0	.0	22.2	.0	.0	.0
	%	9	77.8	.0	.0	.0	.0	22.2			

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TABLE 1.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR ASSOCIATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
26 LIFE SCIENCES	#	22	2	0	4	2	1	2	10	0	1
	%		9.1	.0	18.2	9.1	4.5	9.1	45.5	.0	4.5
	%	11	18.2	.0	36.4	18.2	9.1	18.2			
27 MATHEMATICS	#	7	0	0	1	0	0	3	2	1	0
	%		.0	.0	14.3	.0	.0	42.9	28.6	14.3	.0
	%	4	.0	.0	25.0	.0	.0	75.0			
30 MULTI/INTERDISCIPLINARY STUDIES	#	36	3	0	7	0	4	3	16	0	3
	%		8.3	.0	19.4	.0	11.1	8.3	44.4	.0	8.3
	%	17	17.6	.0	41.2	.0	23.5	17.6			
31 PARKS AND RECREATION	#	13	1	0	4	0	1	3	4	0	0
	%		7.7	.0	30.8	.0	7.7	23.1	30.8	.0	.0
	%	9	11.1	.0	44.4	.0	11.1	33.3			
38 PHILOSOPHY AND RELIGION	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
39 THEOLOGY	#	3	3	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	3	100.0	.0	.0	.0	.0	.0			
40 PHYSICAL SCIENCES	#	9	1	0	1	0	0	0	6	0	1
	%		11.1	.0	11.1	.0	.0	.0	66.7	.0	11.1
	%	2	50.0	.0	50.0	.0	.0	.0			

TABLE 1.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR ASSOCIATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
41 SCIENCE TECHNOLOGIES	#	59	35	3	3	1	1	8	8	0	0
	%		59.3	5.1	5.1	1.7	1.7	13.6	13.6	.0	.0
	%	51	68.6	5.9	5.9	2.0	2.0	15.7			
42 PSYCHOLOGY	#	8	0	0	0	0	0	0	8	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
43 PROTECTIVE SERVICES	#	226	93	4	37	1	18	13	57	2	1
	%		41.2	1.8	16.4	.4	8.0	5.8	25.2	.9	.4
	%	166	56.0	2.4	22.3	.6	10.8	7.8			
44 PUBLIC AFFAIRS	#	27	7	0	3	0	2	2	12	0	1
	%		25.9	.0	11.1	.0	7.4	7.4	44.4	.0	3.7
	%	14	50.0	.0	21.4	.0	14.3	14.3			
45 SOCIAL SCIENCES	#	35	7	0	3	0	2	1	21	0	1
	%		20.0	.0	8.6	.0	5.7	2.9	60.0	.0	2.9
	%	13	53.8	.0	23.1	.0	15.4	7.7			
46 CONSTRUCTION TRADES	#	336	208	10	13	0	2	81	15	2	5
	%		61.9	3.0	3.9	.0	.6	24.1	4.5	.6	1.5
	%	314	66.2	3.2	4.1	.0	.6	25.8			
47 MECHANICS AND REPAIRERS	#	598	256	169	51	6	2	44	33	11	26
	%		42.8	28.3	8.5	1.0	.3	7.4	5.5	1.8	4.3
	%	528	48.5	32.0	9.7	1.1	.4	8.3			

TABLE 1.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR ASSOCIATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
48 PRECISION PRODUCTION											
	#	575	276	106	50	11	21	63	32	4	12
	%		48.0	18.4	8.7	1.9	3.7	11.0	5.6	.7	2.1
	%	527	52.4	20.1	9.5	2.1	4.0	12.0			
49 TRANSPORTATION AND MATERIAL MOVING											
	#	47	19	6	1	2	0	2	15	2	0
	%		40.4	12.8	2.1	4.3	.0	4.3	31.9	4.3	.0
	%	30	63.3	20.0	3.3	6.7	.0	6.7			
50 VISUAL AND PERFORMING ARTS											
	#	56	5	1	6	0	4	5	32	0	3
	%		8.9	1.8	10.7	.0	7.1	8.9	57.1	.0	5.4
	%	21	23.8	4.8	28.6	.0	19.0	23.8			
TOTAL											
		11,958	5,748	896	1,093	72	565	1,286	1,927	53	318
			48.1	7.5	9.1	.6	4.7	10.8	16.1	.4	2.7
		9,660	59.5	9.3	11.3	.7	5.8	13.3			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

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this period. The findings also suggest that the 1983 graduates had been affected to a lesser degree than was true of the 1982 graduates with full-time employment rising from 61.3 percent to 65.3 percent, part-time employment dropping from 5.7 percent to 4.7 percent, unemployment dropping from 12.1 percent to 10.8 and full-time employment in the field of preparation rising from 84.9 percent to 86.2 percent. Another interesting finding is the rise in full-time employment in Pennsylvania from 84.2 percent, the lowest since 1977, to 88.7 percent, the highest percentage figure in this period of time (1977-1983). Finally, it should be noted that there has been a recent pattern of decline in the proportion going on for an advanced degree.

Since the detailed data on the major disciplines found in Table 1.0 are difficult to assimilate easily, the Tables which follow are an attempt to rank the major disciplines of Table 1.0 using selected activity measures (Tables 1.01 through 1.05) and then to examine, in greater detail, major disciplines that have been selected from Table 1.0.

Associate Degree Graduates Employed Full-Time in Their Field of Preparation

Table 1.01 ranks the major disciplines of Table 1.0 according to the proportion of 1982-83 graduates finding employment related to their degree field. The top ten degree fields in Table 1.01 are: Theology, 100.0 percent; Philosophy and Religion, 100.0 percent; Consumer, Personal and Miscellaneous Services, 96.5 percent; Health Sciences, 79.6 percent; Library and Archival Sciences, 77.9 percent; Marketing and Distribution, 73.3 percent; Mechanics and Repairers, and Allied Health, 71.1 percent each; Precision Production, 66.4 percent; and Construction Trades, 64.4 percent while the ten bottom ranking degree fields were: Letters, 0.0 percent; Foreign Languages, 0.0 percent; Mathematics, 0.0 percent; Psychology, 0.0 percent; Parks and Recreation, 7.7 percent; Education, 8.0 percent; Multi/Interdisciplinary Studies, 8.3 percent; Life Sciences, 9.1 percent; Visual and Performing Arts, 10.7 percent; and Physical Sciences, 11.1 percent.

Table 1.01 must be scrutinized carefully since the findings presented here can be misleading. The major disciplines that appear at the bottom of the table tend to be in areas that are typically characterized by their graduates going on for an advanced degree, or they are disciplines where an associate degree is relatively meaningless in terms of employment opportunities. Those major disciplines appearing at the top of Table 1.01 are major disciplines in which the associate degree is not regarded as the terminal degree for degree-related employment in a specific occupation. Also, some areas, such as Theology, Philosophy and Religion may be high or low simply because they have a very small number of graduates. Findings for such major disciplines could be very different from year to year. Reference to Table 0.3, in Section I, concerning sample size, and sampling adequacy, of a degree field should always be made if the data for a given degree field are to be used in making career decisions or in carrying out educational planning.

TABLE 1.01

A RANK ORDERING OF ASSOCIATE DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1982-83 GRADUATES FINDING FULL-TIME EMPLOYMENT RELATED TO THEIR FIELD OF PREPARATION

RANK	MAJOR DISCIPLINE	PERCENT
1.5	Theology	100.0*
1.5	Philosophy and Religion	100.0*
3	Consumer, Personal, and Miscellaneous Services	86.5
4	Health Sciences	79.6
5	Library and Archival Sciences	77.9*
6	Marketing and Distribution	73.3
7.5	Mechanics and Repairers	71.1
7.5	Allied Health	71.1
9	Precision Production	66.4
10	Construction Trades	64.9
11	Science Technologies	64.4
12	Business and Office	63.4
13	Law	61.6
14	Vocational Home Economics	53.6
15	Transportation and Material Moving	53.2
16	Engineering and Engineering-Related Technologies	53.1
17	Agribusiness and Agricultural Production	50.0
18	Computer and Information Sciences	47.9
19	Communications	44.8
20	Communications Technologies	43.1
21	Protection Services	43.0
22	Business and Management	41.5
23	Architecture and Environmental Design	31.4
24	Public Affairs	25.9
25	Renewable Natural Resources	22.1
26	Social Sciences	20.0
27	Liberal/General Studies	17.7
28	Engineering	14.6
29	Physical Sciences	11.1*
30	Visual and Performing Arts	10.7
31	Life Sciences	9.1
32	Multi/Interdisciplinary Studies	8.3
33	Education	8.0
34	Parks and Recreation	7.7
36.5	Psychology	0.0*
36.5	Mathematics	0.0*
36.5	Foreign Languages	0.0*
36.5	Letters	0.0*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED STUDENTS.

Full-Time Degree-Related Employment of Associate Degree Graduates in the Civilian Labor Market

Table 1.01 is primarily of value only when the purpose is one of determining the relative position of a degree field in terms of the proportion of associate degree graduates obtaining employment in the field for which they were prepared. A more meaningful comparison between the degree fields is obtained when only those graduates who remained in the Civilian Labor Market are considered. This has been done in Table 1.02 where we still find disciplines such as Theology, 100 percent; Philosophy and Religion, 100.0 percent; Consumer, Personal and Miscellaneous Sciences, 97.8 percent; Health Sciences, 90.2 percent; Marketing and Distribution, 84.4 percent; Mechanics and Repairers, 80.5 percent; Allied Health, 80.1 percent and Library and Archival Sciences, 77.8 percent ranking among the top ten degree fields, but we also find the Science Technologies, 74.5 percent and Precision Production, 72.5 percent, replacing Transportation and Material Moving, 53.2 percent, and Science Technologies, 64.4 percent. More significantly, we no longer find Psychology and Foreign Languages in the list since the graduates in these disciplines tended to go on for advanced degrees.

The observed differences between Tables 1.01 and 1.02 are, however, not as great as those that will characterize the higher degree levels, where the pursuit of an advanced degree is much more typical.

Associate Degree Graduates Employed Full-Time in Pennsylvania

Table 1.03 ranks the degree program areas of Table 1.0 according to the percentage of 1982-83 associate degree graduates who found full-time employment in Pennsylvania. This is, in part, a measure of Pennsylvania's holding power but it must also be remembered that some degree fields are characterized by a national rather than a local employment market, e.g., Engineering and Engineering-Related Technologies, while others tend to be primarily characterized by local employment, e.g., Parks and Recreation, Protective Services.

Unemployed Associate Degree Graduates in the Civilian Labor Market

Table 1.04 ranks the various degree program areas of Table 1.0 by the degree of reported unemployment for those 1982-83 graduates who were in the Civilian Labor Market. The impact of the economic recession can be seen in this table where the percentage of unemployment is substantial for degree graduates in Agribusiness and Agricultural Production, 29.4 percent; Computer and Information Sciences, 26.1 percent; Engineering and Engineering-Related Technologies, 20.7 percent and Construction Trades, 25.8 percent. In addition, graduates in Mathematics, 75.0 percent; Parks and Recreation, Visual and Performing Arts, 23.8 percent; Renewable Natural Resources, 23.3 percent; Library and Archival Sciences, and Architecture and Environmental Design also experienced high unemployment.

These findings suggest that, in periods of recession, associate degree graduates in fields where a higher level terminal degree exists are not the first choice of employers hiring graduates in that degree field, e.g., Computer and Information Sciences.

TABLE 1.02

A RANK ORDERING OF ASSOCIATE DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1982-83 GRADUATES IN THE CIVILIAN LABOR MARKET WHO FOUND FULL-TIME EMPLOYMENT RELATED TO THEIR FIELD OF PREPARATION

RANK	MAJOR DISCIPLINE	PERCENT
1.5	Theology	100.0*
1.5	Philosophy and Religion	100.0*
3	Consumer, Personal and Miscellaneous Services	97.8
4	Health Sciences	90.2
5	Marketing and Distribution	84.4
6	Transportation and Material Moving	83.3
7	Mechanics and Repairers	80.5
8	Allied Health	80.1
9	Library and Archival Sciences	77.8*
10	Science Technologies	74.5
11.5	Precision Production	72.5
11.5	Business and Office	72.5
13	Vocational Home Economics	69.7
14	Construction Trades	69.4
15	Law	64.0
16	Engineering and Engineering-Related Technologies	62.8
17	Communications Technologies	62.5
18	Business and Management	59.9
19	Agribusiness and Agricultural Production	58.8
20	Protective Services	58.4
21	Computer and Information Sciences	56.7
22	Social Sciences	53.8
23	Communications	52.7
24.5	Public Affairs	50.0
24.5	Physical Sciences	50.0*
26	Engineering	46.2
27	Liberal/General Studies	38.6
28	Architecture and Environmental Design	36.6
29	Renewable Natural Resources	34.9
30	Visual and Performing Arts	28.6
31	Life Sciences	18.2
32	Education	17.9
33	Multi/Interdisciplinary Studies	17.6
34	Parks and Recreation	11.1*
35	Mathematics	0.0*
36	Letters	0.0*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES IN THE CIVILIAN LABOR MARKET. PROGRAM AREAS WITH NO REPORTED CIVILIAN LABOR MARKET EMPLOYMENT ARE NOT SHOWN HERE.

TABLE 1.03

A RANK ORDERING OF ASSOCIATE DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF FULL-TIME EMPLOYED 1982-83 GRADUATES WHO FOUND EMPLOYMENT IN PENNSYLVANIA

RANK	MAJOR DISCIPLINE	PERCENT
6	Social Sciences	100.0*
6	Public Affairs	100.0*
6	Physical Sciences	100.0*
6	Theology	100.0*
6	Philosophy and Religion	100.0*
6	Parks and Recreation	100.0*
6	Multi/Interdisciplinary Studies	100.0*
6	Mathematics	100.0*
6	Agribusiness and Agricultural Production	100.0
6	Library and Archival Sciences	100.0*
12	Education	98.1
13	Protective Services	96.3
14	Business and Management	96.1
16	Business and Office	95.8
16	Health Sciences	95.8
16	Vocational Home Economics	95.8
18	Construction Trades	95.7
19	Liberal/General Studies	95.5
20	Communications	93.2
21	Computer and Information Sciences	92.1
22	Visual and Performing Arts	91.7
23	Engineering	90.9
24	Science Technologies	90.5
25	Allied Health	90.3
26	Law	85.4
27	Communications Technologies	83.9
28	Engineering and Engineering-Related Technologies	77.2
29	Marketing and Distribution	76.5
30	Life Sciences	75.0
31	Precision Production	73.6
32	Transportation and Material Moving	71.4
33	Architecture and Environmental Design	69.6
34	Mechanics and Repairers	63.7
35	Renewable Natural Resources	56.0

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED FULL-TIME EMPLOYED GRADUATES. PROGRAM AREAS WITH NO REPORTED FULL-TIME EMPLOYMENT ARE NOT SHOWN HERE.

TABLE 1.04

A RANK ORDERING OF ASSOCIATE DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF UNEMPLOYED 1982-83 GRADUATES IN THE CIVILIAN LABOR MARKET

RANK	MAJOR DISCIPLINE	PERCENT
1	Mathematics	75.0*
2	Parks and Recreation	33.3*
3	Agribusiness and Agricultural Production	29.4
4	Computer and Information Sciences	26.1
5	Construction Trades	25.8
6	Visual and Performing Arts	23.8
7	Renewable Natural Resources	23.3
8	Library and Archival Sciences	22.2*
9	Engineering and Engineering-Related Technologies	20.7
10	Architecture and Environmental Design	20.0
11	Life Sciences	18.2
12	Multi/Interdisciplinary Studies	17.6
13	Liberal/General Studies	16.4
14	Science Technologies	15.7
15	Public Affairs	14.3
16	Business and Management	13.3
17	Communications	12.3
18.5	Precision Production	12.0
18.5	Law	12.0
20	Vocational Home Economics	10.6
21	Education	10.4
22	Communications Technologies	10.0
23	Business and Office	9.8
24	Mechanics and Repairers	8.3
25	Allied Health	8.1
26	Protective Services	7.8
27.5	Social Sciences	7.7
27.5	Engineering	7.7
29	Transportation and Material Moving	6.7
30	Marketing and Distribution	5.0
31	Health Sciences	2.3
34	Theology	0.0*
34	Physical Sciences	0.0*
34	Philosophy and Religion	0.0*
34	Letters	0.0*
34	Consumer, Personal, and Miscellaneous Services	0.0

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES IN THE CIVILIAN LABOR MARKET. PROGRAM AREAS WITH NO REPORTED CIVILIAN LABOR MARKET EMPLOYMENT ARE NOT SHOWN HERE.

TABLE 1.05

A RANK ORDERING OF ASSOCIATE DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1982-83 GRADUATES PURSUING AN ADVANCED DEGREE

RANK	MAJOR DISCIPLINE	PERCENT
1.5	Psychology	100.0*
1.5	Foreign Languages	100.0*
3	Letters	83.3*
4	Engineering	68.3
5	Physical Sciences	66.7*
6	Social Sciences	60.0
7	Visual and Performing Arts	57.1
8	Education	51.7
9	Life Sciences	45.5
11	Public Affairs	44.4
11	Multi/Interdisciplinary Studies	44.4
11	Liberal/General Studies	44.0
13	Renewable Natural Resources	36.8
14	Transportation and Material Moving	31.9
15	Parks and Recreation	30.8
16.5	Mathematics	28.6*
16.5	Business and Management	28.6
18	Protective Services	25.2
19	Communications Technologies	24.1
20	Vocational Home Economics	21.1
21	Agribusiness and Agricultural Production	15.0
22	Engineering and Engineering-Related Technologies	14.3
23	Science Technologies	13.6
24	Communications	11.9
25	Computer and Information Sciences	11.0
26	Health Sciences	10.4
27.5	Business and Office	9.6
27.5	Marketing and Distribution	9.6
29	Architecture and Environmental Design	8.6
30	Allied Health	7.9
31	Precision and Production	5.6
32	Mechanics and Repairers	5.5
33	Construction Trades	4.5
34.5	Consumer, Personal, and Miscellaneous Services	1.9
34.5	Law	1.9
37	Theology	0.0*
37	Philosophy and Religion	0.0*
37	Library and Archival Sciences	0.0*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES.

Associate Degree Graduates Pursuing an Advanced Degree

Table 1.05 ranks the degree program areas of Table 1.0 according to the percentage of the reported graduates in each degree program area who went on for an advanced degree.

As might be expected, graduates in the Social Sciences (60.0%), Life Sciences (45.5%), Physical Sciences (66.7%) and Psychological Sciences (100.0%), rank high in this regard along with graduates in Education (51.7%), Letters (83.3%), Foreign Languages (100.0%), and the Visual and Performing Arts (57.1%), while graduates in fields such as: Construction Trades (4.5%), Mechanics and Repair (5.5%), Precision and Production Trades (5.6%), Allied Health (7.9%), and Library and Archival Sciences (0.0%) do not. Some degree fields, at this level, also had few or none going on to advanced degree work, e.g., Consumer, Personal and Miscellaneous Services (1.9%), Law (1.8%), Theology (0.0%) and Philosophy and Religion (0.0%), possibly because programs at the associate degree level are not attracting students planning on higher degrees.

DETAILED ANALYSES OF SELECTED ASSOCIATE DEGREE DISCIPLINES

Many of the fifty major discipline categories specified by the Classification of Instructional Programs (CIP) Code, at the two-digit level, are not sufficiently detailed for the purposes of the users of this report. It was not practicable, however, to go to the four-digit or six-digit CIP code level in preparing Table 1.0 due to the sheer number of degree program categories that would be generated. As a consequence, this portion of the report will be used to focus upon selected degree program areas of Table 1.0.

Results for Associate Degree Graduates in Agriculture and Renewable Natural Resources

Table 1.06 summarizes postgraduate activity findings for specific degree fields of interest within the major disciplines of Agriculture and of Renewable Natural Resources. When analyzing this table, and others like it in this report, only two major analyses will be made, in contrast to the analyses for Tables 1.0, 2.0, 3.0, 4.0, and 5.0, in this report.

The two variables that seemed most useful in looking at tables such as Table 1.06 were: (1) degree-related, full-time employment rates for graduates entering the Civilian Labor Market and (2) the proportion of full-time employed graduates who are employed in Pennsylvania.

When the degree fields of Table 1.06 are ranked according to rate of full-time, degree-related employment in the Civilian Labor Market the following listing is obtained:

TABLE 1.06

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN AGRICULTURE AND RENEWABLE NATURAL RESOURCES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED: IN PA	EMPLOYED IN FIELD PREPARED: OUTSIDE PA	EMPLOYED IN OTHER FIELD: IN PA	EMPLOYED IN OTHER FIELD: OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Agribusiness and Agricultural Production	#	20	10	0	1	0	1	5	3	0	0
	%		50.0	.0	5.0	.0	5.0	25.0	15.0	.0	.0
	%	17	58.8	.0	5.9	.0	5.9	29.4			
Horticulture	#	7	3	0	1	0	0	2	1	0	0
	%		42.9	.0	14.3	.0	.0	28.6	14.3	.0	.0
	%	6	50.0	.0	16.7	.0	.0	33.3			
Agribusiness and Agricultural Production, Other	#	13	7	0	0	0	1	3	2	0	0
	%		53.8	.0	.0	.0	7.7	23.1	15.4	.0	.0
	%	11	63.6	.0	.0	.0	9.1	27.3			
Renewable Natural Resources	#	68	5	10	9	1	8	10	25	0	0
	%		7.4	14.7	13.2	1.5	11.8	14.7	36.8	.0	.0
	%	43	11.6	23.3	20.9	2.3	18.6	23.3			
Renewable Natural Resources, General	#	2	0	0	2	0	0	0	0	0	0
	%		.0	.0	100.0	.0	.0	.0	.0	.0	.0
	%	2	.0	.0	100.0	.0	.0	.0			
Fishing and Fisheries	#	10	0	4	0	0	0	3	3	0	0
	%		.0	40.0	.0	.0	.0	30.0	30.0	.0	.0
	%	7	.0	57.1	.0	.0	.0	42.9			
Forestry Production	#	36	3	6	2	0	4	4	17	0	0
	%		8.3	16.7	5.6	.0	11.1	11.1	47.2	.0	.0
	%	19	15.8	31.6	10.5	.0	21.1	21.1			

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TABLE 1.06 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Wildlife Management	#	20	2	0	5	1	4	3	5	0	0
	%		10.0	.0	25.0	5.0	20.0	15.0	25.0	.0	.0
	%	15	13.3	.0	33.3	6.7	26.7	20.0			
TOTAL	#	88	15	10	10	1	9	15	28	0	0
	%		17.0	11.4	11.4	1.1	10.2	17.1	31.8	.0	.0
	%	60	25.0	16.7	16.7	1.7	15.0	25.0			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

RANK	N	DEGREE FIELD	PERCENT
1	17	Agribusiness and Agriculture Production, Other	63.6
2	7	Fishing and Fisheries	57.1
3	6	Horticulture	50.0
4	19	Forestry Production	47.4
-	60	All Agriculture and Renewable Natural Resource Graduates	41.7
5	15	Wildlife Management	13.3
6	2	Renewable Natural Resources, General	0.0

It is apparent that Agriculture and Renewable Natural Resources graduates, at this degree level, had difficulty finding degree-related employment in 1983.

When ranked according to the rate of Pennsylvania employment of full-time employed graduates, the degree fields of Agriculture and Renewable Natural Resources, at the associate degree level, ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
2	4	Horticulture	100.0
2	7	Agribusiness and Agricultural Production, Other	100.0
2	2	Renewable Natural Resources, General	100.0
4	8	Wildlife Management	87.5
-	36	All Agriculture and Renewable Natural Resources Graduates	69.4
5	11	Forestry Production	45.5
6	4	Fishing and Fisheries	0.0

Results for Associate Degree Graduates in Business and in Marketing

Table 1.07 gives detailed data on the activities of the associate degree graduates of 1982-83 who received degrees in fields under the general rubric of Business and Marketing. When the twenty-one degree fields of Table 1.07 are ranked according to the proportion of graduates in the Civilian Labor Market who found full-time, degree-related employment, they rank as follows:

RANK	N	DEGREE FIELD	PERCENT
1.5	6	Labor/Industrial Relations	100.0
1.5	43	Entrepreneurship	100.0
3	50	Apparel and Accessories Marketing	98.0
4	24	Trade and Industrial Supervision and Management	87.5
5	52	Transportation and Travel Marketing	84.5
6	1,037	Secretarial and Related Programs	80.1
7	41	Institutional Management	70.7

TABLE 1.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN BUSINESS, MARKETING, AND MANAGEMENT, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED: IN PA	EMPLOYED IN FIELD PREPARED: OUTSIDE PA	EMPLOYED IN OTHER FIELD: IN PA	EMPLOYED IN OTHER FIELD: OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Business and Management	#	1325	529	21	163	7	77	122	379	3	24
	%		39.9	1.6	12.3	.5	5.8	9.2	28.6	.2	1.8
	%	919	57.6	2.3	17.7	.8	8.4	13.3			
Business and Management, General	#	172	101	2	20	0	8	19	19	0	3
	%		58.7	1.2	11.6	.0	4.7	11.0	11.0	0	1.7
	%	150	67.3	1.3	13.3	.0	5.3	12.7			
Accounting	#	199	98	2	12	1	14	26	35	1	10
	%		49.2	1.0	6.0	.5	7.0	13.1	17.6	.5	5.0
	%	153	64.1	1.3	7.8	.7	9.2	17.0			
Business Administration and Management	#	828	264	13	120	6	46	68	298	2	11
	%		31.9	1.6	14.5	.7	5.6	8.2	36.0	.2	1.3
	%	517	51.1	2.5	23.2	1.2	8.9	13.2			
Institutional Management	#	49	26	3	3	0	5	4	8	0	0
	%		53.1	6.1	6.1	.0	10.2	8.2	16.3	.0	.0
	%	41	63.4	7.3	7.3	.0	10.2	9.8			
Labor/Industrial Relations	#	8	6	0	0	0	0	0	2	0	0
	%		75.0	.0	.0	.0	.0	.0	25.0	.0	.0
	%	6	100.0	.0	.0	.0	.0	.0			
Marketing Management and Research	#	24	11	0	3	0	1	2	7	0	0
	%		45.8	.0	12.5	.0	4.2	8.3	29.2	.0	.0
	%	17	64.7	.0	17.6	.0	5.9	11.8			

TABLE 1.07 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Real Estate	#	8	2	0	3	0	2	1	0	0	0
	%		25.0	.0	37.5	.0	25.0	12.5	.0	.0	.0
	%	8	25.0	.0	37.5	.0	25.0	12.5			
Trade and Industrial Supervision and Management	#	27	20	1	1	0	1	1	3	0	0
	%		74.1	3.7	3.7	.0	3.7	3.7	11.1	.0	.0
	%	24	83.3	4.2	4.2	.0	4.2	4.2			
Business and Management, Other	#	10	1	0	1	0	0	1	7	.0	.0
	%		10.0	.0	10.0	.0	.0	10.0	70.0	.0	.0
	%	3	33.3	.0	33.3	.0	.0	33.3			
Business and Office	#	2,118	1,283	59	202	6	121	181	204	3	59
	%		60.6	2.8	9.5	.3	5.7	8.5	9.6	.1	2.8
	%	1,852	69.3	3.2	10.9	.3	6.5	9.8			
Accounting, Bookkeeping, and Related Programs	#	443	243	23	33	0	23	30	74	3	14
	%		54.9	5.2	7.4	.0	5.2	6.8	16.7	.7	3.2
	%	352	61.5	6.5	9.4	.0	6.5	8.5			
Banking and Related Financial Programs	#	14	8	0	3	0	1	1	0	0	1
	%		57.1	.0	21.4	.0	7.1	7.1	.0	.0	7.1
	%	13	61.5	.0	23.1	.0	7.7	7.7			
Business Data Processing and Related Programs	#	479	182	10	86	4	43	48	98	0	8
	%		38.0	2.1	18.0	.8	9.0	10.0	20.5	.0	1.7
	%	373	48.8	2.7	23.1	1.1	11.5	12.9			
Office Supervision and Management	#	15	4	1	2	0	2	3	3	0	0
	%		26.7	6.7	13.3	.0	13.3	20.0	20.0	.0	.0
	%	12	33.3	8.3	16.7	.0	16.7	25.0			

TABLE 1.07 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Secretarial and Related Programs	#	1,089	806	25	68	2	40	96	19	0	33
	%		74.0	2.3	6.2	.2	3.7	8.8	1.7	.0	3.0
	%	1,037	77.7	2.4	6.6	.2	3.9	9.3			
Typing, General Office, and Related Programs	#	21	12	0	4	0	4	0	0	0	1
	%		57.1	.0	19.0	.0	19.0	.0	.0	.0	4.8
	%	20	60.0	.0	20.0	.0	20.0	.0			
Business and Office, Other	#	57	28	0	6	0	8	3	10	0	2
	%		49.1	.0	10.5	.0	14.0	5.3	17.5	.0	3.5
	%	45	62.2	.0	13.3	.0	17.8	6.7			
Marketing and Distribution	#	251	139	45	14	2	7	11	24	1	8
	%		55.4	17.9	5.6	.8	2.8	4.4	9.6	.4	3.2
	%	218	63.8	20.6	6.4	.9	3.2	5.0			
Apparel and Accessories Marketing	#	59	46	3	1	0	0	0	1	0	8
	%		78.0	5.1	1.7	.0	.0	.0	1.7	.0	13.6
	%	50	92.0	6.0	2.0	.0	.0	.0			
Entrepreneurship	#	49	6	37	0	0	0	0	6	0	0
	%		12.2	75.5	.0	.0	.0	.0	12.2	.0	.0
	%	43	14.0	86.0	.0	.0	.0	.0			
General Marketing	#	87	45	2	7	1	7	9	15	1	0
	%		51.7	2.3	8.0	1.1	8.0	10.3	17.2	1.1	.0
	%	71	63.4	2.8	9.9	1.4	9.9	12.7			
Transportation and Travel Marketing	#	52	41	3	5	1	0	2	0	0	0
	%		78.8	5.8	9.6	1.9	.0	3.8	.0	.0	.0
	%	52	78.8	5.8	9.6	1.9	.0	3.8			

TABLE 1.07 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Marketing and Distribution, Other	#	4	1	0	1	0	0	0	2	0	0
	%		25.0	0	25.0	.0	.0	.0	50.0	.0	.0
	%	2	50.0	0	50.0	.0	.0	.0			
TOTAL	#	3,694	1,951	125	379	15	205	314	607	7	91
	%		52.8	3.4	10.3	.4	5.5	8.5	16.4	.2	2.5
	%	2,989	65.3	4.2	12.7	.5	6.8	10.5			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

-	2,989	All Business and Marketing Graduates	69.5
8	150	Business and Management, General	68.6
9	352	Accounting, Bookkeeping, and Related Programs	68.0
10	71	General Marketing	66.2
11	153	Accounting	65.4
12	17	Marketing Management and Research	64.7
13	45	Business and Office, Other	62.2
14	13	Banking and Related Financial Programs	61.5
15	20	Typing, General Office, and Related Programs	60.0
16	517	Business Administration and Management	53.6
17	373	Business Data Processing and Related Programs	51.5
18	2	Marketing and Distribution, Other	50.0
19	12	Office Supervision and Management	41.6
20	3	Business and Management, Other	33.3
21	8	Real Estate	25.0

Although the graduates of 1983 are not experiencing the high level of degree-related employment that graduates prior to 1982 had enjoyed, fifteen of the twenty-one degree fields of Table 1.07 had sixty percent or more of their job-seeking associate degree graduates finding degree-related employment, and six fields had seventy-five percent or more finding such employment.

When the twenty-one degree fields of Table 1.07 are ranked according to the rate of Pennsylvania based employment among those who had found full-time employment of some kind, the degree fields of Table 1.07 ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
4	6	Labor/Industrial Relations	100.0
4	14	Marketing Management and Research	100.0
4	2	Business and Management, Other	100.0
4	11	Banking and Related Financial Programs	100.0
4	16	Typing, General Office, and Related Programs	100.0
4	34	Business and Office, Other	100.0
4	2	Marketing and Distribution, Other	100.0
8	123	Business and Management, General	98.4
9	113	Accounting	97.3
10	901	Secretarial and Related Programs	97.0
11	5	Real Estate	96.1
12	22	Trade and Industrial Supervision and Management	95.5
13	403	Business Administration and Management	95.3
14	282	Business Data Processing and Related Programs	95.0
15	55	General Marketing	94.5
--	2,470	All Business and Marketing Graduates	94.3
16	50	Apparel and Accessories Marketing	94.0
17	299	Accounting, Bookkeeping, and Related Programs	92.3
18	50	Transportation and Travel Marketing	92.0
19	32	Institutional Management	90.6
20	7	Office Supervision and Management	85.7
21	43	Entrepreneurship	14.0

It is clear that the associate degree graduates of 1983 tended to find employment in the State of Pennsylvania. The only exceptions to this were the graduates in the degree field of Entrepreneurship where eighty-six percent of the full-time employed found positions outside of Pennsylvania.

Results for Associate Degree Graduates in Education

It is clear in Table 1.08, that associate degree graduates in Education are relatively few in number and are likely to go on for an advanced degree. It is also clear that there are relatively few education-related degree fields at this level.

When ranked according to the rate of degree-related, full-time Civilian Labor Market employment, the seven degree fields of Table 1.08 ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
1	1	Teacher Education, Specific Subject Area	100.0
2	6	Pre-Elementary Education	50.0
3	15	Early Childhood Education	46.7
-	67	All Education Graduates	17.9
4	41	Education, General	2.4
5.5	3	Elementary Education	0.0
5.5	1	Secondary Education	0.0
-	0	Other General Teacher Education Programs	NA

These graduates, for the most part, simply do not qualify for nor obtain degree-relevant employment.

When ranked on the basis of full-time Pennsylvania based employment, the degree fields of Table 1.08 ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
2.5	36	Education, General	100.0
2.5	5	Pre-Elementary Education	100.0
2.5	1	Secondary Education	100.0
2.5	1	Teacher Education, Specific Subject Area	100.0
-	53	All Education Graduates	98.1
5	10	Early Childhood Education	90.0
-	0	Elementary Education	NA
-	0	Other General Education Programs	NA

TABLE 1.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN EDUCATION, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Education, General	#	87	1	0	35	0	2	3	42	0	4
	%		1.1	.0	40.2	.0	2.3	3.4	48.3	.0	4.6
	%	41	2.4	.0	85.4	.0	4.9	7.3			
Teacher Education, General Programs	#	61	9	1	6	0	5	4	34	0	2
	%		14.8	1.6	9.8	.0	8.2	6.6	55.7	.0	3.3
	%	25	36.0	4.0	24.0	.0	20.0	16.0			
Elementary Education	#	18	0	0	0	0	1	2	14	0	1
	%		.0	.0	.0	.0	5.6	11.1	77.8	.0	5.6
	%	3	.0	.0	.0	.0	33.3	66.7			
Pre-Elementary Education	#	9	3	0	2	0	0	1	2	0	1
	%		33.3	.0	22.2	.0	.0	11.1	22.2	.0	11.1
	%	6	50.0	.0	33.3	.0	.0	16.7			
Secondary Education	#	5	0	0	1	0	0	0	4	0	0
	%		.0	.0	20.0	.0	.0	.0	80.0	.0	0
	%	1	.0	.0	100.0	.0	.0	.0			
Early Childhood Education	#	20	6	1	3	0	4	1	5	0	0
	%		30.0	5.0	15.0	.0	20.0	5.0	25.0	.0	.0
	%	15	40.0	6.7	20.0	.0	26.7	6.7			
Other General Programs	#	9	0	0	0	0	0	0	9	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			

TABLE 1.08 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Teacher Education, Specific Subject Areas	#	3	1	0	0	0	0	0	2	0	0
	%		33.3	.0	.0	.0	.0	.0	66.7	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
TOTAL	#	151	11	1	41	0	7	7	78	0	6
	%		7.3	.7	27.2	.0	4.6	4.6	51.7	.0	4.0
	%	67	16.4	1.5	61.2	.0	10.4	10.4			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

Results for Associate Degree Graduates in General Engineering and in Engineering and Engineering-Related Technologies

Table 1.09 gives detailed degree field information on those graduates in Table 1.0 who were designated as being graduates in the major discipline area of Engineering and Engineering-Related Technologies.

When the degree fields of Table 1.09 are ranked according to degree of full-time, degree-related Civilian Labor Market employment, they rank as follows:

RANK	N	DEGREE FIELD	PERCENT
1	87	Electromechanical Instrumentation and Maintenance Technologies	87.3
2	69	Engineering and Engineering-Related Technologies, Other	73.9
3	171	Civil Technologies	64.9
4	981	Electrical and Electronic Technologies	64.7
-	1,908	All Engineering and Engineering-Related Technologies Graduates	62.7
5	103	Architectural Technologies	62.2
6	88	Environmental Control Technologies	61.4
7	319	Mechanical and Related Technologies	53.0
8	13	Engineering, General	46.2
9	77	Industrial Production Technologies	39.0

It would seem that 1983 graduates in most of these degree fields had some difficulty finding degree-related work. The only exception was that of graduates who specialized in the field of electromechanical instrumentation and maintenance technologies.

When ranked according to the degree to which the full-time employed graduates found employment in Pennsylvania, the degree fields of Table 1.09 ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
1	52	Industrial Production Technologies	94.2
2	11	Engineering, General	90.9
3	142	Civil Technologies	85.9
4	55	Engineering and Engineering-Related Technologies, Other	81.8
5	70	Architectural Technologies	80.0
6	64	Environmental Control Technologies	79.7
-	1,435	All Engineering and Engineering-Related Technologies Graduates	77.3
7	741	Electrical and Electronic Technologies	75.6
8	213	Mechanical and Related Technologies	73.2

TABLE 1.09

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD
FOR ASSOCIATE DEGREE GRADUATES IN ENGINEERING AND ENGINEERING-RELATED TECHNOLOGIES AND IN GENERAL ENGINEERING, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED: IN PA	EMPLOYED IN FIELD PREPARED: OUTSIDE PA	EMPLOYED IN OTHER FIELD: IN PA	EMPLOYED IN OTHER FIELD: OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Engineering, General	#	41	5	1	5	0	1	1	28	0	0
	%		12.2	2.4	12.2	.0	2.4	2.4	68.3	.0	.0
	%	13	38.5	7.7	38.5	.0	7.7	7.7			
Architectural Technologies	#	124	52	12	4	2	7	26	20	0	1
	%		41.9	9.7	3.2	1.6	5.6	21.0	16.1	.0	.8
	%	103	50.5	11.7	3.9	1.9	6.8	25.2			
Civil Technologies	#	203	92	19	30	1	10	19	26	4	2
	%		45.3	9.4	14.8	.5	4.9	9.4	12.8	2.0	1.0
	%	171	53.8	11.1	17.5	.6	5.8	11.1			
Electrical and Electronic Technologies	#	1,119	459	176	101	5	19	221	123	12	3
	%		41.0	15.7	9.0	.4	1.7	19.7	11.0	1.1	.3
	%	981	46.8	17.9	10.3	.5	1.9	22.5			
Electromechanical Instrumentation and Maintenance Technologies	#	89	49	27	11	0	0	0	2	0	0
	%		55.1	30.3	12.4	.0	.0	.0	2.2	.0	.0
	%	87	56.3	31.0	12.6	.0	.0	.0			
Environmental Control Technologies	#	100	44	10	7	3	9	15	10	2	0
	%		44.0	10.0	7.0	3.0	9.0	15.0	10.0	2.0	.0
	%	88	50.0	11.4	8.0	3.4	10.2	17.0			
Industrial Production Technologies	#	102	27	3	22	0	7	18	24	1	0
	%		26.5	2.9	21.6	.0	6.9	17.6	23.5	1.0	.0
	%	77	35.1	3.9	28.6	.0	9.1	23.4			

TABLE 1.09 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Mechanical and Related Technologies	#	408	117	52	39	5	26	80	87	0	2
	%		28.7	12.7	9.6	1.2	6.4	19.6	21.3	.0	.5
	%	319	36.7	16.3	12.2	1.6	8.2	25.1			
Engineering and Engineering-Related Technologies, Other	#	97	41	10	4	0	1	13	28	0	0
	%		42.3	10.3	4.1	.0	1.0	13.4	28.9	.0	.0
	%	69	59.4	14.5	5.8	.0	1.4	18.8			
TOTAL	#	2,283	886	310	223	16	80	393	348	19	8
	%		38.8	13.6	9.8	.7	3.5	17.2	15.2	.8	.4
	%	1,908	46.4	16.3	11.7	.8	4.2	20.6			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

9	87	Electromechanical Instrumentation and Maintenance Technologies	69.0

Apparently, when degree-related employment was found it was frequently found outside of Pennsylvania. This was particularly true for graduates in the Electromechanical Instrumentation and Maintenance Technologies.

Results for Associate Degree Graduates in the Allied Health Professions

Table 1.10 gives a detailed summary of degree fields that are found within the major discipline area of Allied Health found in Table 1.0. Many of these represent professions for which the Associate Degree is considered the appropriate degree for those preparing to work in the allied health profession in question.

When the twenty-eight degree fields of Table 1.10 are listed on the basis of the proportion of their graduates finding full-time, degree-related employment in the Civilian Labor Market, they are ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
4.5	5	Cardiopulmonary Technology	100.0
4.5	3	Medical Radiation Dosimetry	100.0
4.5	15	Nuclear Medical Technology	
4.5	2	Ultrasound Technology	100.0
4.5	17	Occupational Therapy Assisting	100.0
4.5	36	Physical Therapy	100.0
4.5	37	Physical Therapy Assisting	100.0
4.5	33	Respiratory Therapy	100.0
9	44	Respiratory Therapy Technology	95.4
10	14	Dental Assisting	92.9
11.5	11	Pharmacy Assisting	90.9
11.5	11	Physician Assisting - Primary Care	90.9
13.5	18	Mental Health/Human Services	88.9
13.5	27	Medical Records Technology	88.9
15	59	Radiograph Medical Technology	86.5
16	201	Practical Nursing	83.1
-	911	All Allied Health Graduates	80.1
17	5	Emergency Medical Technology - Paramedic	80.0
18	120	Medical Assisting	78.4
19	40	Dental Hygiene	77.5
20	101	Medical Laboratory Technology	73.2
21	23	Allied Health, Other	60.9
22	15	Geriatric Aide	60.0
23	7	Nurse Assisting	57.1
24	9	Recreational Therapy	55.6
25	3	Surgical Technology	33.3
26	28	Medical Office Management	28.6
27	4	Medical Laboratory Technologies, Other	25.0
28	16	Ward Clerk	6.3

TABLE 1.10

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
MAJOR DISCIPLINE FOR ASSOCIATE DEGREE GRADUATES IN THE ALLIED HEALTH PROFESSIONS, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Dental Assisting	#	15	13	0	0	0	1	0	1	0	0
	%		86.7	.0	.0	.0	6.7	.0	6.7	.0	.0
	%	14	92.9	.0	.0	.0	7.1	.0			
Dental Hygiene	#	42	31	0	2	0	6	1	2	0	0
	%		73.8	.0	4.8	.0	14.3	2.4	4.8	.0	.0
	%	40	77.5	.0	5.0	.0	15.0	2.5			
Cardiopulmonary Technology	#	6	3	2	0	0	0	0	0	0	1
	%		50.0	33.3	.0	.0	.0	.0	.0	.0	16.7
	%	5	60.0	40.0	.0	.0	.0	.0			
Emergency Medical Technology-Paramedic	#	6	4	0	0	0	1	0	1	0	0
	%		66.7	.0	.0	.0	16.7	.0	16.7	.0	.0
	%	5	80.0	.0	.0	.0	20.0	.0			
Medical Radiation Dosimetry	#	3	1	2	0	0	0	0	0	0	0
	%		33.3	66.7	.0	.0	.0	.0	.0	.0	.0
	%	3	33.3	66.7	.0	.0	.0	.0			
Nuclear Medical Technology	#	18	14	1	0	0	0	0	2	0	1
	%		77.8	5.6	.0	.0	.0	.0	11.1	.0	5.6
	%	15	93.3	6.7	.0	.0	.0	.0			
Radiograph Medical Technology	#	71	47	4	1	0	3	4	10	0	2
	%		66.2	5.6	1.4	.0	4.2	5.6	14.1	.0	2.8
	%	59	79.7	6.8	1.7	.0	5.1	6.8			

TABLE 1.10 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Respiratory Therapy Technology	#	45	32	10	0	0	2	0	0	.0	1
	%		71.1	22.2	.0	.0	4.4	.0	.0	.0	2.2
	%	44	72.7	22.7	.0	.0	4.5	.0			
Surgical Technology	#	5	1	0	1	0	0	1	2	0	0
	%		20.0	.0	20.0	.0	.0	20.0	40.0	.0	.0
	%	3	33.3	.0	33.3	.0	.0	33.3			
Ultrasound Technology	#	2	2	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	2	100.0	.0	.0	.0	.0	.0			
Medical Laboratory Technology	#	123	66	8	5	1	9	12	20	0	2
	%		53.7	6.5	4.1	.8	7.3	9.8	16.3	.0	1.6
	%	101	65.3	7.9	5.0	1.0	8.9	11.9			
Medical Laboratory Technologies, Other	#	5	1	0	0	0	3	0	1	0	0
	%		20.0	.0	.0	.0	60.0	.0	20.0	.0	.0
	%	4	25.0	.0	.0	.0	75.0	.0			
Mental Health/Human Services	#	23	16	0	1	0	0	1	4	0	1
	%		69.6	.0	4.3	.0	.0	4.3	17.4	.0	4.3
	%	18	88.9	.0	5.6	.0	.0	5.6			
Medical Assisting	#	129	86	8	5	0	8	13	4	0	5
	%		66.7	6.2	3.9	.0	6.2	10.1	3.1	.0	3.9
	%	120	71.7	6.7	4.2	.0	6.7	10.8			
Medical Office Management	#	30	8	0	2	0	8	10	2	0	0
	%		26.7	.0	6.7	.0	26.7	33.3	6.7	.0	.0
	%	28	28.6	.0	7.1	.0	28.6	35.7			

TABLE 1.10 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Medical Records Technology	#	28	23	1	2	0	1	0	0	0	1
	%		82.1	3.6	7.1	.0	3.6	.0	.0	.0	3.6
	%	27	85.2	3.7	7.4	.0	3.7	.0			
Pharmacy Assisting	#	12	10	0	0	0	0	1	1	0	0
	%		83.3	.0	.0	.0	.0	8.3	8.3	.0	.0
	%	11	90.9	.0	.0	.0	.0	9.1			
Physician Assisting - Primary Care	#	11	8	2	0	0	0	1	0	0	0
	%		72.7	18.2	.0	.0	.0	9.1	.0	.0	.0
	%	11	72.7	18.2	.0	.0	.0	9.1			
Ward Clerk	#	16	1	0	3	0	8	4	0	0	0
	%		6.3	.0	18.8	.0	50.0	25.0	.0	.0	.0
	%	16	6.3	.0	18.8	.0	50.0	25.0			
Geriatric Aide	#	23	9	0	1	0	0	5	0	0	0
	%		39.1	.0	4.3	.0	.0	21.7	.0	.0	.0
	%	15	60.0	.0	6.7	.0	.0	33.3			
Nurse Assisting	#	16	4	0	1	0	1	1	8	0	1
	%		25.0	.0	6.3	.0	6.3	6.3	50.0	.0	6.3
	%	7	57.1	.0	14.3	.0	14.3	14.3			
Practical Nursing	#	218	159	8	4	0	13	17	13	0	4
	%		72.9	3.7	1.8	.0	6.0	7.8	6.0	.0	10.0
	%	201	79.1	4.0	2.0	.0	6.5	8.5			
Occupational Therapy Assisting	#	20	15	2	0	0	0	0	1	0	2
	%		75.0	10.0	.0	.0	.0	.0	5.4	.0	10.0
	%	17	88.2	11.8	.0	.0	.0	.0			

TABLE 1.10 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Physical Therapy	#	36	20	16	0	0	0	0	0	0	0
	%		55.6	44.4	.0	.0	.0	.0	.0	.0	.0
	%	36	55.6	44.4	.0	.0	.0	.0			
Physical Therapy Assisting	#	42	33	4	0	0	0	0	3	1	1
	%		78.6	9.5	.0	.0	.0	.0	7.1	2.4	2.4
	%	37	89.2	10.8	.0	.0	.0	.0			
Recreational Therapy	#	12	5	0	1	0	2	1	2	0	1
	%		41.7	.0	8.3	.0	16.7	8.3	16.7	.0	8.3
	%	9	55.6	.0	11.1	.0	22.2	11.1			
Respiratory Therapy	#	33	28	5	0	0	0	0	0	0	0
	%		84.8	15.2	.0	.0	.0	.0	.0	.0	.0
	%	33	84.8	15.2	.0	.0	.0	.0			
Allied Health, Other	#	29	14	0	5	0	3	1	4	0	2
	%		48.3	.0	17.2	.0	10.4	3.4	13.8	.0	6.9
	%	23	60.9	.0	21.7	.0	13.0	4.4			
TOTAL	#	1,026	657	73	35	1	71	74	81	1	33
	%		64.0	7.1	3.4	.1	6.9	7.2	7.9	.1	3.2
	%	911	72.1	8.0	3.8	.1	7.8	8.1			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

It seems obvious from the above ranking that there was evidence of a continuing strong demand for allied health specialities, e.g., Physical Therapy, Respiratory Therapy, Nuclear Medical Technology, Medical Radiation Dosimetry, Cardiopulmonary Technology, Dental Assisting, Physician Assisting. There were, however, other degree fields for which relatively little job-related demand at the associate degree level was in evidence, e.g., Surgical Technology, Medical Office Management, Recreational Therapy, Nurse Assisting, and Geriatric Aide.

When placed in order according to the proportion of full-time employed associate degree graduates who were employed in Pennsylvania, the degree fields of Table 1.10 ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
7.5	13	Dental Assisting	100.0
7.5	33	Dental Hygiene	100.0
7.5	4	Emergency Medical Technology - Paramedic	100.0
7.5	2	Surgical Technology	100.0
7.5	2	Ultrasound Technology	100.0
7.5	1	Medical Laboratory Technologies, Other	100.0
7.5	17	Mental Health/Human Services	100.0
7.5	10	Medical Office Management	100.0
7.5	10	Pharmacy Assisting	100.0
7.5	4	Ward Clerk	100.0
7.5	10	Geriatric Aide	100.0
7.5	5	Nurse Assisting	100.0
7.5	6	Recreational Therapy	100.0
7.5	19	Allied Health, Other	100.0
15	26	Medical Records Technology	96.2
16	171	Practical Nursing	95.3
17	15	Nuclear Medical Technology	93.3
18	52	Radiograph Medical Technology	92.3
19	99	Medical Assisting	91.9
-	766	All Allied Health Graduates	90.3
20	37	Physical Therapy Assisting	89.2
21	80	Medical Laboratory Technology	88.8
22	17	Occupational Therapy Assisting	88.2
23	33	Respiratory Therapy	84.8
24.5	5	Cardiopulmonary Technology	80.0
24.5	10	Physician Assisting, Primary Care	80.0
26	42	Respiratory Therapy Technology	76.2
27	36	Physical Therapy	55.5
28	3	Medical Radiation Dosimetry	33.3

It is clear that graduates in the allied health fields have a high rate of Pennsylvania employment, with only those in the degree fields of Physical Therapy and Medical Radiation Dosimetry obviously responding to strong national rather than state labor market demands.

Results for Associate Degree Graduates in the Health Sciences

At the associate degree level the primary Health Science degree field is that of Nursing (R.N.) with some graduates also found in the category of Health Sciences, Other (see Table 1.11). Not unexpectedly, Table 1.11 indicates that 90.3 percent of the full-time employed associate degree graduates in Nursing found degree-related employment. Of those who entered the Civilian Labor Market and found full-time employment, 95.8 percent obtained their employment in Pennsylvania. Obviously, Pennsylvania is not only a major producer of nurses, at the Associate and Baccalaureate Degree levels, but also a major utilizer of its own product.

Results for Associate Degree Graduates in the Physical Sciences and the Physical Science Technologies

Table 1.12 summarizes the findings for Associate Degree graduates in the Physical Sciences and in the Physical Science Technologies. There are relatively few graduates in these areas who enter the Civilian Labor Market since the Physical Science degree is not typically considered a terminal degree for employment in the physical sciences. Nevertheless, it is worthwhile to ask what happens to those Physical Science graduates who do enter the labor market.

When the degree fields of Table 1.12 were ranked according to the proportion of 1982-83 graduates in the Civilian Labor Market who found full-time, degree-related employment, the Physical Science degree fields of Table 1.12 ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
1	1	Physics	100.0
2	12	Physical Science Technologies	83.4
-	53	All Physical Science and Physical Science Technologies Graduates	73.6
3	18	Physical Science Technologies, Other	72.3
4	21	Nuclear Technologies	71.4
5	1	Chemistry	0.0

The degree field of "Physical Sciences, General" is not shown here since there were no graduates who entered the labor market. All three graduates who were listed under this category had, in fact, gone on for an advanced degree. There was also only one Physics graduate in the labor market, the remaining two reported graduates, had gone on for an advanced degree in Physics.

When ranked according to the proportion of full-time employed graduates finding full-time employment in Pennsylvania, the degree fields of Table 1.12 ranked as follows:

TABLE 1.11

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN THE HEALTH SCIENCES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Nursing	#	827	633	27	3	1	50	17	84	1	11
	%		76.5	3.3	.4	.1	6.0	2.1	10.2	.1	1.3
	%	731	86.6	3.7	.4	.1	6.8	2.3			
Health Sciences, Other	#	3	0	0	0	0	1	0	2	0	0
	%		.0	.0	.0	.0	33.3	.0	66.7	.0	.0
	%	1	.0	.0	.0	.0	100.0	.0			
TOTAL	#	830	633	27	3	1	51	17	86	1	11
	%		76.3	3.3	.4	.1	6.1	2.0	10.4	.1	1.3
	%	732	86.5	3.7	.4	.1	7.0	2.3			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

TABLE 1.12

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN THE PHYSICAL SCIENCES AND THE PHYSICAL SCIENCE TECHNOLOGIES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Physical Science, General	#	3	0	0	0	0	0	0	3	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
Chemistry	#	3	0	0	1	0	0	0	1	0	1
	%		.0	.0	33.3	.0	.0	.0	33.3	.0	33.3
	%	1	.0	.0	100.0	.0	.0	.0			
Physics	#	3	1	0	0	0	0	0	2	0	0
	%		33.3	.0	.0	.0	.0	.0	66.7	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
Nuclear Technologies	#	24	15	0	2	0	0	4	3	0	0
	%		62.5	.0	8.3	.0	.0	16.7	12.5	.0	.0
	%	21	71.4	.0	9.5	.0	.0	19.0			
Physical Science Technologies	#	14	8	2	1	0	1	0	2	0	0
	%		57.1	14.3	7.1	.0	7.1	.0	14.3	.0	.0
	%	12	66.7	16.7	8.3	.0	8.3	.0			
Physical Science Technologies, Other	#	21	12	1	0	1	0	4	3	0	0
	%		57.1	4.8	.0	4.8	.0	19.0	14.3	.0	.0
	%	18	66.7	5.6	.0	5.6	.0	22.2			
TOTAL	#	68	36	3	4	1	1	8	14	0	1
	%		52.9	4.4	5.9	1.5	1.5	11.7	20.6	.0	1.5
	%	53	67.9	5.7	7.5	1.9	1.9	15.1			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

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RANK	N	DEGREE FIELD	PERCENT
2	1	Chemistry	100.0
2	1	Physics	100.0
2	17	Nuclear Technologies	100.0
-	44	All Physical Science and Physical Science/Technologies Graduates	90.9
4	14	Physical Science Technologies, Other	85.7
5	11	Physical Science Technologies	81.8

As with graduates in the Allied Health and Health Science disciplines, there is a strong tendency for these graduates to find Pennsylvania based employment.

Results for Associate Degree Graduates in the Social Sciences

Here again, in Table 1.13 the degree fields shown are not usually considered to be terminal degrees that lead to degree-related employment. As a consequence, the number of associate degree graduates in these fields tends to be relatively small, especially the number of graduates entering the Civilian Labor Market. Nevertheless, it was considered to be worthwhile to see what happened to those Social Science graduates who did enter the Civilian Labor Market.

When the Associate Degree fields of Table 1.13 were ranked according to the proportion of graduates in the Civilian Labor Market obtaining full-time, degree-related employment, the degree fields of Table 1.13 were ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
2.5	1	Criminology	100.0
2.5	1	Economics	100.0
2.5	1	Political Science and Government	100.0
2.5	1	Sociology	100.0
-	13	All Social Science Graduates	53.8
5	6	Social Sciences, General	50.0
6	3	Social Sciences, Other	0.0

The degree field of History was omitted from these rankings since there were no History graduates in the Civilian Labor Market. Only one student was reported as having a degree in this area and that individual went on for an advanced degree. In fact, as might be expected, a very large proportion of the graduates of Table 1.13 went on for advanced degrees, including 77.8 percent of those categorized as in the degree field of Social Sciences, Other. The small number of graduates in these degree fields, however, makes it impossible to interpret this data with any confidence.

No ranking of the Social Sciences degree fields of Table 1.13 with regard to Pennsylvania employment was needed since all of the graduates in Table 1.13

TABLE 1.13
POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN THE SOCIAL SCIENCES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Social Sciences, General	#	9	3	0	1	0	1	1	3	0	0
	%		33.3	.0	11.1	.0	11.1	11.1	33.3	.0	.0
	%	6	50.0	.0	16.7	.0	16.7	16.7			
Criminology	#	2	1	0	0	0	0	0	1	0	0
	%		50.0	.0	.0	.0	.0	.0	50.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
Economics	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
History	#	1	0	0	0	0	0	0	1	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
Political Science and Government	#	2	1	0	0	0	0	0	1	0	0
	%		50.0	.0	.0	.0	.0	.0	50.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
Sociology	#	2	1	0	0	0	0	0	1	0	0
	%		50.0	.0	.0	.0	.0	.0	50.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			

TABLE 1.13 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Social Sciences, Other	#	18	0	0	2	0	1	0	14	0	1
	%		.0	.0	11.1	.0	5.6	.0	77.8	.0	5.6
	%	3	.0	.0	66.7	.0	33.3	.0			
TOTAL	#	35	7	0	3	0	2	1	21	0	1
	%		20.0	.0	8.6	.0	5.7	2.9	60.0	.0	2.9
	%	13	53.8	.0	23.1	.0	15.4	7.7			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

who were reported as having entered the Civilian Labor Market were also found to have full-time employment in Pennsylvania. Again, the small numbers involved makes these results difficult to interpret.

Results for Associate Degree Graduates in Construction, Industrial, Transportation and Repair-Related Programs

An important mission of the associate degree programs in Pennsylvania involves the training of students for entry into occupations for which these associate degree programs are a direct preparation.

When the degree fields of Table 1.14 were ranked according to the proportion of associate degree graduates finding full-time, degree-related employment upon their entry into the Civilian Labor Market, the degree fields of Table 1.14 ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
1	5	Woodworking	100.0
2.5	240	Vehicle and Mobile Equipment Mechanics and Repair	85.0
2.5	20	Air Transportation	85.0
4	68	Electrical and Power Transmission Installation	80.9
5	10	Transportation and Material Moving, Other	80.0
6	133	Drafting	79.7
7.5	158	Electrical and Electronics Equipment Repair	79.1
7.5	86	Mechanics and Repairers, Other	79.1
-	1,399	All Construction, Industrial, Transportation, and Repair-Related Programs	75.0
9	44	Plumbing, Pipefitting, and Steamfitting	72.7
10	230	Graphic and Printing Communications	72.1
11	116	Carpentry	71.6
12	159	Precision Metal Work	66.0
13	44	Heating, Air Conditioning, and Refrigeration Mechanics	63.6
14	83	Construction Trades, Other	56.6
15	3	Brickmasonry, Stonemasonry, and Tile Setting	33.3

Despite the highly applied nature of these degrees, the 1983 graduate in several of these degree field categories experienced some difficulty in finding Civilian Labor Market, degree-related, full-time employment, e.g., Brickmasonry, Stonemasonry, and Tile Setting (33.3%), Construction Trades, Other (56.6%), Heating, Air Conditioning, and Refrigeration (63.6%) and Precision Metal Work (66.0%).

When the degree fields of Table 1.14 are ranked according to the proportion of full-time employed graduates who had found a full-time position in Pennsylvania, the degree fields of Table 1.14 ranked as follows:

TABLE 1.14
POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES WITH CONSTRUCTION, INDUSTRIAL, TRANSPORTATION, AND REPAIR RELATED DEGREES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Construction Trades	#	336	208	10	13	0	2	81	15	2	5
	%		61.9	3.0	3.9	.0	.6	24.1	4.5	.6	1.5
	%	314	66.2	3.2	4.1	.0	.6	25.8			
Brickmasonry, Stonemasonry, and Tile Setting	#	3	1	0	1	0	0	1	0	0	0
	%		33.3	.0	33.3	.0	.0	33.3	.0	.0	.0
	%	3	33.3	.0	33.3	.0	.0	33.3			
Carpentry	#	126	80	3	3	0	1	29	8	0	2
	%		63.5	2.4	2.4	.0	.8	23.0	6.3	.0	1.6
	%	116	69.0	2.6	2.6	.0	.9	25.0			
Electrical and Power Transmission Installation	#	70	49	6	6	0	1	6	1	1	0
	%		70.0	8.6	8.6	.0	1.4	8.6	1.4	1.4	.0
	%	68	72.1	8.8	8.8	.0	1.5	8.8			
Plumbing, Pipefitting, and Steam Fitting	#	46	32	0	0	0	0	12	2	0	0
	%		69.6	.0	.0	.0	.0	26.1	4.3	.0	.0
	%	44	72.7	.0	.0	.0	.0	27.3			
Construction Trades, Other	#	91	46	1	3	0	0	33	4	1	3
	%		50.5	1.1	3.3	.0	.0	36.3	4.4	1.1	3.3
	%	83	55.4	1.2	3.6	.0	.0	39.8			
Mechanics and Repairers	#	598	256	169	51	6	2	44	33	11	26
	%		42.8	28.3	8.5	1.0	.3	7.4	5.5	1.8	4.3
	%	528	48.5	32.0	9.7	1.1	.4	8.3			

TAPLE 1.14 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Electrical and Electronics Equipment Repair	#	174	101	24	19	0	0	14	4	2	10
	%		58.0	13.8	10.9	.0	.0	8.0	2.3	1.1	5.7
	%	158	63.9	15.2	12.0	.0	.0	8.9			
Heating, Air Conditioning, and Refrigeration Mechanics	#	57	26	2	8	0	2	6	12	1	0
	%		45.6	3.5	14.0	.0	3.5	10.5	21.1	1.8	.0
	%	44	59.1	4.5	18.2	.0	4.5	13.6			
Vehicle and Mobile Equipment Mechanics and Repair	#	267	83	121	17	5	0	14	9	6	12
	%		31.1	45.3	6.4	1.9	.0	5.2	3.4	2.2	4.5
	%	240	34.6	50.4	7.1	2.1	.0	5.8			
Mechanics and Repairers, Other	#	100	46	22	7	1	0	10	8	2	4
	%		46.0	22.0	7.0	1.0	.0	10.0	8.0	2.0	4.0
	%	86	53.5	25.6	8.1	1.2	.0	11.6			
Precision Production	#	575	276	106	50	11	21	63	32	4	12
	%		48.0	18.4	8.7	1.9	3.7	11.0	5.6	.7	2.1
	%	527	52.4	20.1	9.5	2.1	4.0	12.0			
Drafting	#	150	93	13	6	1	5	15	11	2	4
	%		62.0	8.7	4.0	.7	3.3	10.0	7.3	1.3	2.7
	%	133	69.9	9.8	4.5	.8	3.8	11.3			
Graphic and Printing Communications	#	251	90	76	22	10	10	22	14	1	6
	%		35.9	30.3	8.8	4.0	4.0	8.8	5.6	.4	2.4
	%	230	39.1	33.0	9.6	4.3	4.3	9.6			
Precision Metal Work	#	167	88	17	22	0	6	26	6	1	1
	%		52.7	10.2	13.2	.0	3.6	15.6	3.6	.6	.6
	%	159	55.3	10.7	13.8	.0	3.8	16.4			

TABLE 1.14 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Woodworking	#	7	5	0	0	0	0	0	1	0	1
	%		71.4	.0	.0	.0	.0	.0	14.3	.0	14.3
	%	5	100.0	.0	.0	.0	.0	.0			
Transportation and Material Moving	#	47	19	6	1	2	0	2	15	2	0
	%		40.4	12.8	2.1	4.3	.0	4.3	31.9	4.3	.0
	%	30	63.3	20.0	3.3	6.7	.0	6.7			
Air Transportation	#	27	11	6	0	2	0	1	6	1	0
	%		40.7	22.2	.0	7.4	.0	3.7	22.2	3.7	.0
	%	20	55.0	30.0	.0	10.7	.0	5.0			
Transportation and Material Moving, Other	#	20	8	0	1	0	0	1	9	1	0
	%		40.0	.0	5.0	.0	.0	5.0	45.0	5.0	.0
	%	10	80.0	.0	10.0	.0	.0	10.0			
TOTAL	#	1,556	759	291	115	19	25	190	95	19	43
	%		48.8	18.7	7.4	1.2	1.6	12.2	6.1	1.2	2.8
	%	1,399	54.2	20.8	8.2	1.4	1.8	13.6			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

RANK	N	DEGREE FIELD	PERCENT
2.5	2	Brickmasonry, Stonemasonry, and Tile Setting	100.0
2.5	32	Plumbing, Pipefitting, and Steam Fitting	100.0
2.5	5	Woodworking	100.0
2.5	9	Transportation and Material Moving, Other	100.0
5	50	Construction Trades, Other	98.0
6	86	Carpentry	96.5
7	36	Heating, Air Conditioning and Refrigeration Mechanics	94.4
8	61	Electrical and Power Transmission Installation	90.2
9	113	Drafting	87.6
10	127	Precision Metal Work	86.6
11	144	Electrical and Electronics Equipment Repair	83.3
-	1,184	All Construction, Industrial, Transportation, and Repair-Related Programs	73.8
12	76	Mechanics and Repairers, Other	69.7
13	19	Air Transportation	57.9
14	198	Graphic and Printing Communications	56.6
15	226	Vehicle and Mobile Equipment Mechanics and Repair	44.4

As can be seen, the degree fields of Table 1.14 varied considerably in terms of Pennsylvania based employment, with a little over a quarter of these graduates obtaining full-time employment outside of Pennsylvania. Graduates in some of these degree fields had a substantially lower rate of Pennsylvania employment, e.g., Vehicle and Mobile Equipment, Mechanics and Repair (44.4%), Graphic and Printing Communications (56.6%), and Air Transportation (57.9%). These low ranked degree fields apparently have a strong national market, relative to Pennsylvania's needs.

Results for Associate Degree Graduates in the Visual and Performing Arts

Table 1.15 summarizes detailed degree field findings for the major discipline of Visual and Performing Arts found in Table 1.0. The general picture found in Table 1.15 is one of a relatively low rate of degree-related, full-time employment upon entry into the Civilian Labor Market with a substantial proportion of these graduates going on for an advanced degree rather than seeking employment. Apparently, associate degrees in these fields are not typically considered to be terminal degrees.

When the degree-fields of Table 1.15 were ranked according to the proportion of 1983 graduates finding degree-related, full-time employment in the Civilian Labor Market, the degree fields of Table 1.15 ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
1	2	Fine Arts	50.0
2	7	Visual and Performing Arts, Other	42.9

TABLE 1.15

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN THE VISUAL AND PERFORMING ARTS, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Visual and Performing Arts, General	#	15	0	0	3	0	0	0	12	0	0
	%		.0	.0	20.0	.0	.0	.0	80.0	.0	.0
	%	3	.0	.0	100.0	.0	.0	.0			
Dramatic Arts	#	1	0	0	0	0	1	0	0	0	0
	%		.0	.0	.0	.0	100.0	.0	.0	.0	.0
	%	1	.0	.0	.0	.0	100.0	.0			
Fine Arts	#	7	1	0	0	0	1	0	5	0	0
	%		14.3	.0	.0	.0	14.3	.0	71.4	.0	.0
	%	2	50.0	.0	.0	.0	50.0	.0			
Graphic Arts Technology	#	9	1	1	2	0	1	3	1	0	0
	%		11.1	11.1	22.2	.0	11.1	33.3	11.1	.0	.0
	%	8	12.5	12.5	25.0	.0	12.5	37.5			
Music	#	3	0	0	0	0	0	0	2	0	1
	%		.0	.0	.0	.0	.0	.0	66.7	.0	33.3
	%	0	.0	.0	.0	.0	.0	.0			
Visual and Performing Arts, Other	#	21	3	0	1	0	1	2	12	0	2
	%		14.3	.0	4.8	.0	4.8	9.5	57.1	.0	9.5
	%	7	42.9	.0	14.3	.0	14.3	28.6			
TOTAL	#	56	5	1	6	0	4	5	32	0	3
	%		8.9	1.8	10.7	.0	7.1	8.9	57.1	.0	5.4
	%	21	23.8	4.8	28.6	.0	19.0	23.8			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

-	21	All Visual and Performing Arts, Graduates	28.6
3	8	Graphic Arts Technologies	25.0
4.5	3	Visual and Performing Arts, General	0.0
4.5	1	Dramatic Arts	0.0

The degree field of Music is not shown here since, of the three reported music graduates, one was not engaged in employment-related activity nor seeking an advanced degree while the other two were pursuing an advanced degree. Here again, most of these degree field categories have a very small number of graduates in the Civilian Labor Market making the data difficult to interpret.

When ranked according to the proportion of full-time employed graduates who found full-time employment in Pennsylvania, the degree fields of Table 1.15 ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
2	3	Visual and Performing Arts, General	100.0
2	1	Fine Arts	100.0
2	4	Visual and Performing Arts, Other	100.0
-	12	All Visual and Performing Arts Graduates	75.0
4	4	Graphic Arts Technology	75.0
-	0	Dramatic Arts	NA

These rankings suggest that these graduates tended to seek and find their employment entirely in Pennsylvania with the exception of associate degree graduates in Graphic Arts Technologies (75.0%). The small numbers involved, however, make this observation tentative at best.

SOME COMMENTS ON THE FINDINGS FOR ASSOCIATE DEGREE GRADUATES

Despite the recent economic recession, the associate degree graduate has continued to be able to find degree-related employment at a level close to that for the years prior to this recessional period. One interesting development, however, is the marked reduction in the proportion going on for an advanced degree. It may be conjectured that a larger proportion of those seeking an associate degree are now vocationally oriented in contrast to past years when there was a larger proportion planning on transfer to a four-year institution.

The new CIP code has permitted a more detailed look at associate degree post-graduate activity than was possible in the past. This will, as time passes, permit the development of time-trends for a greater variety of associate degree fields than in the past. Unfortunately, the shift from the old HEGIS four-digit code to the new CIP six-digit code resulted in such a dramatic change in program classifications at this degree level, that a table reflecting degree-specific time trends could not be prepared at this time. The last

section of this report does, however, give time trend data for higher level degree graduates where the degree program definitions have remained relatively stable.

VIII. RESULTS FOR BACCALAUREATE DEGREE GRADUATES

Table 2.0, on the pages that follow, summarizes the postgraduate activity of the baccalaureate graduates of 1982-83 in terms of the broadest (2-digit level) Classification of Instructional Programs (CIP) categories available. As before, a more detailed analysis of selected major disciplines from Table 2.0 will be made using a combination of the four-digit and six-digit levels of the CIP classification system.

The findings of Table 2.0 are given in terms of two separate percentage distributions that accompany the numerical counts for a given major discipline area. Numerical counts are shown for each of the postgraduate activity categories used in this study. The first of the two percentage distributions is simply the percentage of reported graduates in each type of activity. The second percentage distribution indicates the percentage of graduates in the Civilian Labor Market engaged in employment-related activity, i.e., it excludes those in military service, those pursuing an advanced degree, and those engaged in activity unrelated to employment were excluded.

For each of the major disciplines, the findings are given in terms of: (1) the number of graduates who found degree-related employment in Pennsylvania, (2) the number of graduates who found degree-related employment outside of Pennsylvania, (3) the number of graduates who found employment in Pennsylvania that was unrelated to their degree field, (4) the number of graduates who found employment outside of Pennsylvania that was unrelated to their degree field, (5) the number of graduates who found part-time employment, (6) the number of graduates who were unemployed and still seeking employment, (7) the number of graduates who had entered military service, (8) the number of graduates who were pursuing an advanced degree and, finally, (9) the number of graduates who were engaged in other activities, i.e., those not employed and not in graduate school but who were also not seeking employment.

Below is a comparison of selected measures on the baccalaureate graduates of 1976-77 through 1982-83. The measures were derived from this report and from previous reports in this series.

Year	Reported Graduates	Full-Time Employed	Part-Time Employed	Un-employed	Seeking Advanced Degree	Full-Time Employed In Field Prepared	Full-Time Employed In Pa.
		%	%	%	%	%	%
1977	29,140	62.0	5.8	15.9	16.3	75.5	69.6
1978	28,273	66.0	4.4	12.8	16.8	77.3	68.5
1979	29,818	69.5	4.2	9.6	16.7	77.6	67.4
1980	32,858	70.3	4.0	10.0	15.7	80.8	67.0
1981	31,941	67.6	4.7	11.7	16.0	75.9	66.1
1982	24,176	62.9	5.4	14.3	16.2	80.4	66.0
1983	25,528	61.7	6.7	13.1	15.6	80.6	64.9

TABLE 2.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR BACCALAUREATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
01 AGRIBUSINESS AND AGRICULTURAL PRODUCTION	#	57	25	7	6	5	1	9	4	0	0
	%		43.9	12.3	10.5	8.8	1.8	15.8	7.0	.0	.0
	%	53	47.2	13.2	11.3	9.4	1.9	17.0			
02 AGRICULTURAL SCIENCES	#	400	162	103	24	17	17	25	48	1	3
	%		40.5	25.7	6.0	4.2	4.2	6.3	12.0	.2	.7
	%	348	46.6	29.6	6.9	4.9	4.9	7.2			
03 RENEWABLE NATURAL RESOURCES	#	101	17	12	17	5	5	22	17	5	1
	%		16.8	11.9	16.8	5.0	5.0	21.8	16.8	5.0	1.0
	%	78	21.8	15.4	21.8	6.4	6.4	28.2			
04 ARCHITECTURE AND ENVIRONMENTAL DESIGN	#	140	46	40	5	9	6	22	10	1	1
	%		32.9	28.6	3.6	6.4	4.3	15.7	7.1	.7	.7
	%	128	35.9	31.3	3.9	7.0	4.7	17.2			
05 AREA AND ETHNIC STUDIES	#	34	1	2	4	4	3	5	11	0	4
	%		2.9	5.9	11.8	11.8	8.8	14.7	32.4	.0	11.8
	%	19	5.3	10.5	21.1	21.1	15.8	26.3			
06 BUSINESS AND MANAGEMENT	#	6,260	2,509	1,240	481	206	355	931	415	77	46
	%		40.1	19.8	7.7	3.3	5.7	14.9	6.6	1.2	.7
	%	5,722	43.8	21.7	8.4	3.6	6.2	16.3			
07 BUSINESS AND OFFICE	#	87	49	7	12	1	10	3	2	1	2
	%		56.3	8.0	13.8	1.1	11.5	3.4	2.3	1.1	2.3
	%	82	59.8	8.5	14.6	1.2	12.2	3.7			

TABLE 2.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR BACCALAUREATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
08 MARKETING AND DISTRIBUTION	#	351	144	46	23	4	46	70	12	3	3
	%		41.0	13.1	6.6	1.1	13.1	19.9	3.4	.9	.9
	%	333	43.2	13.8	6.9	1.2	13.8	21.0			
09 COMMUNICATIONS	#	991	271	140	149	75	118	170	54	10	4
	%		27.3	14.1	15.0	7.6	11.9	17.2	5.4	1.0	.4
	%	923	29.4	15.2	16.1	8.1	12.8	18.4			
10 COMMUNICATIONS TECHNOLOGIES	#	5	2	0	2	0	1	0	0	0	0
	%		40.0	.0	40.0	.0	20.0	.0	.0	.0	.0
	%	5	40.0	.0	40.0	.0	20.0	.0			
11 COMPUTOR AND INFORMATION SCIENCES	#	933	363	243	56	5	61	127	52	18	8
	%		38.9	26.0	6.0	.5	6.5	13.6	5.6	1.9	.9
	%	855	42.5	28.4	6.5	.6	7.1	14.9			
13 EDUCATION	#	3,056	986	503	266	71	478	344	359	12	37
	%		32.3	16.5	8.7	2.3	15.6	11.3	11.7	.4	1.2
	%	2,648	37.2	19.0	10.0	2.7	18.1	13.0			
14 ENGINEERING	#	1,737	360	645	48	35	21	296	217	106	9
	%		20.7	37.1	2.8	2.0	1.2	17.0	12.5	6.1	.5
	%	1,405	25.6	45.9	3.4	2.5	1.5	21.1			
15 ENGINEERING AND ENGINEERING-RELATED TECHNOLOGIES	#	250	97	70	7	4	6	60	3	1	2
	%		38.8	28.0	2.8	1.6	2.4	24.0	1.2	.4	.8
	%	244	39.8	28.7	2.9	1.6	2.5	24.6			

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TABLE 2.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR BACCALAUREATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
16 FOREIGN LANGUAGES	#	194	21	26	27	17	18	31	48	2	4
	%		10.8	13.4	13.9	8.8	9.3	16.0	24.7	1.0	2.1
	%	140	15.0	18.6	19.3	12.1	12.9	22.1			
17 ALLIED HEALTH	#	483	283	84	18	8	11	22	47	1	9
	%		58.6	17.4	3.7	1.7	2.3	4.6	9.7	.2	1.9
	%	426	66.4	19.7	4.2	1.9	2.6	5.2			
18 HEALTH SCIENCES	#	1,438	893	215	21	20	43	43	185	10	8
	%		62.1	15.0	1.5	1.4	3.0	3.0	12.9	.7	.6
	%	1,235	72.3	17.4	1.7	1.6	3.5	3.5			
19 HOME ECONOMICS	#	359	133	65	27	12	37	43	41	0	1
	%		37.0	18.1	7.5	3.3	10.3	12.0	11.4	.0	.3
	%	317	42.0	20.5	8.5	3.8	11.7	13.6			
20 VOCATIONAL HOME ECONOMICS	#	99	45	21	1	1	5	8	12	2	4
	%		45.5	21.2	1.0	1.0	5.1	8.1	12.1	2.0	4.0
	%	81	55.6	25.9	1.2	1.2	6.2	9.9			
22 LAW	#	22	0	1	2	0	2	4	12	1	0
	%		.0	4.5	9.1	.0	9.1	18.2	54.5	4.5	.0
	%	9	.0	11.1	22.2	.0	22.2	44.4			
23 LETTERS	#	694	119	106	82	56	51	100	146	7	21
	%		17.1	15.3	11.8	8.1	7.3	15.3	21.0	1.0	3.0
	%	520	22.9	20.4	15.8	10.8	9.8	20.4			

TABLE 2.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR BACCALAUREATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
24 LIBERAL/GENERAL STUDIES	#	153	40	15	19	6	12	23	28	6	4
	%		26.1	9.8	12.4	3.9	7.8	15.0	18.3	3.9	2.6
	%	115	34.8	13.0	16.5	5.2	10.4	20.0			
25 LIBRARY AND ARCHIVAL SCIENCES	#	30	16	7	2	1	3	0	1	0	0
	%		53.3	23.3	6.7	3.3	10.0	.0	3.3	.0	.0
	%	29	55.2	24.1	6.9	3.4	10.3	.0			
26 LIFE SCIENCES	#	1,312	207	117	86	35	48	130	659	13	17
	%		15.8	8.9	6.6	2.7	3.7	9.9	50.2	1.0	1.3
	%	623	33.2	18.8	13.8	5.6	7.7	20.9			
27 MATHEMATICS	#	368	110	110	19	8	7	36	66	10	2
	%		29.9	29.9	5.2	2.2	1.9	9.8	17.9	2.7	.5
	%	290	37.9	37.9	6.6	2.8	2.4	12.4			
28 MILITARY SCIENCES	#	3	0	3	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	3	.0	100.0	.0	.0	.0	.0			
30 MULTI/INTERDISCIPLINARY STUDIES	#	359	67	53	28	17	19	65	85	14	11
	%		18.7	14.8	7.8	4.7	5.3	18.1	23.7	3.9	3.1
	%	249	26.9	21.3	11.2	6.8	7.6	26.1			
31 PARKS AND RECREATION	#	50	13	5	6	1	9	14	1	1	0
	%		26.0	10.0	12.0	2.0	18.0	28.0	2.0	2.0	.0
	%	48	27.1	10.4	12.5	2.1	18.8	29.2			

TABLE 2.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR BACCALAUREATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
38 PHILOSOPHY AND RELIGION	#	173	25	23	26	16	8	6	64	1	4
	%		14.5	13.3	15.0	9.2	4.6	3.5	37.0	.6	2.3
	%	104	24.0	22.1	25.0	15.4	7.7	5.8			
39 THEOLOGY	#	96	32	7	22	8	2	5	20	0	0
	%		33.3	7.3	22.9	8.3	2.1	5.2	20.8	.0	.0
	%	76	42.1	9.2	28.9	10.5	2.6	6.6			
40 PHYSICAL SCIENCES	#	772	101	91	47	26	19	98	345	34	11
	%		13.1	11.8	6.1	3.4	2.5	12.7	44.7	4.4	1.4
	%	382	26.4	23.8	12.3	6.8	5.0	25.7			
41 SCIENCE TECHNOLOGIES	#	8	5	1	1	0	0	1	0	0	0
	%		62.5	12.5	12.5	.0	.0	12.5	.0	.0	.0
	%	8	62.5	12.5	12.5	.0	.0	12.5			
42 PSYCHOLOGY	#	1,022	251	84	112	67	60	94	316	9	29
	%		24.6	8.2	11.0	6.6	5.9	9.2	30.9	.9	2.8
	%	668	37.6	12.6	16.8	10.0	9.0	14.1			
43 PROTECTIVE SERVICES	#	389	107	37	49	24	31	69	52	12	8
	%		27.5	9.5	12.6	6.2	8.0	17.7	13.4	3.1	2.1
	%	317	33.8	11.7	15.5	7.6	9.8	21.8			
44 PUBLIC AFFAIRS	#	359	119	32	43	16	27	54	58	7	3
	%		33.1	8.9	12.0	4.5	7.5	15.0	16.2	1.9	.8
	%	291	40.9	11.0	14.8	5.5	9.3	18.6			

TABLE 2.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR BACCALAUREATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
45 SOCIAL SCIENCES	#	1,963	322	253	253	168	97	295	462	54	59
	%		16.4	12.9	12.9	8.6	4.9	15.0	23.5	2.8	3.0
	%	1,388	23.2	18.2	18.2	12.1	7.0	21.3			
48 PRECISION PRODUCTION	#	26	10	9	2	0	1	2	2	0	0
	%		38.5	34.6	7.7	.0	3.8	7.7	7.7	.0	.0
	%	24	41.7	37.5	8.3	.0	4.2	8.3			
50 VISUAL AND PERFORMING ARTS	#	754	189	116	72	42	73	105	131	3	23
	%		25.1	15.4	9.5	5.6	9.7	13.9	17.4	.4	3.1
	%	597	31.7	19.4	12.1	7.0	12.2	17.6			
TOTAL		25,528	8,140	4,539	2,065	990	1,711	3,338	3,985	422	338
			31.9	17.8	8.1	3.9	6.7	13.1	15.6	1.7	1.3
		20,783	39.2	21.8	9.9	4.8	8.2	16.1			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

A slightly smaller percentage of baccalaureate graduates found full-time employment in 1983 than in 1982 continuing the general pattern of lower full-time employment found in recent years. This is, apparently, a result of the economic depression that the country has recently experienced. A slight rise in part-time employment and a slight fall in unemployment occurred between 1982 and 1983 but, nevertheless, the figures for 1982 and 1983 still contrast unfavorably with those of previous years. There was also a slight reduction in the percentage going on for an advanced degree but the figure of 15.6 percent for 1983 is not appreciably different from that of prior years, with the exception of 1978 and 1979 when there was a slight but temporary rise in the proportion going on for an advanced degree.

When the proportion of full-time employed graduates obtaining employment related to their degree field is examined, we find that there was no appreciable change from the figure for 1982, i.e., 80.6 compared with 80.4 percent and that the proportions for the last four years (1981 excepted) have been larger than those found earlier. Apparently, a larger proportion of the full-time employed have found employment related to their degree in recent years than was typical earlier in this period.

In contrast, a lower proportion of full-time employed gradustes are finding employment in Pennsylvania than was the case in previous years. This may be a reflection of the difficulties Pennsylvania has had in retaining and attracting industry and business during the difficult economic period the state has recently endured.

Bachelor's Degree Graduates Employed Full-Time in Their Field of Preparation

Table 2.01 ranks the major disciplines found in Table 2.0 according to the proportion of baccalaureate graduates who found full-time employment related to their field of preparation. In general, the major disciplines found at the top of Table 2.01 are those that do not have a large proportion of their graduates going on to obtain an advanced degree and/or those that are highly occupation oriented. Those at the bottom of the table tend to be discipline areas that require an advanced degree for degree-related employment as well as having, possibly, a relatively lower level of employment demand in general. These rankings are, moreover, somewhat difficult to interpret because of the substantial numbers going on for a graduate degree.

Full-Time Degree-Related Employment of Bachelor's Degree Graduates in the Civilian Labor Market

While a great many comparisons between the major discipline areas of Table 2.0 could be made, it is clear that the most important question is that of how successful graduates are in a given major discipline when they seek degree-related employment in the Civilian Labor Market rather than go on for a graduate degree. Table 2.02 answers this question by ranking the major disciplines of Table 2.0 according to the percentage of graduates in each major discipline area finding full-time degree-related employment in the Civilian Labor Market.

TABLE 2.01

A RANK ORDERING OF BACCALAUREATE DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1982-83 GRADUATES FINDING FULL-TIME EMPLOYMENT RELATED TO THEIR FIELD OF PREPARATION

RANK	MAJOR DISCIPLINE	PERCENT
1	Military Sciences	100.0*
2	Health Sciences	77.1
3	Library and Archival Sciences	76.6
4	Allied Health	76.0
5	Science Technologies	75.0*
6	Precision Production	73.1
7	Engineering and Engineering-Related Technologies	66.8
8	Vocational Home Economics	66.7
9	Agricultural Sciences	66.2
10	Computer and Information Sciences	64.9
11	Business and Office	64.3
12	Architecture and Environmental Design	61.5
13	Business and Management	59.9
14	Mathematics	59.8
15	Engineering	57.8
16	Agribusiness and Agricultural Production	56.2
17	Home Economics	55.1
18	Marketing and Distribution	54.1
19	Education	48.8
20	Public Affairs	42.0
21	Communications	41.4
22	Theology	40.6
23	Visual and Performing Arts	40.5
24	Communications Technologies	40.0*
25	Protective Services	37.0
26	Parks and Recreation	36.0
27	Liberal/General Studies	35.9
28	Multi/Interdisciplinary Studies	33.5
29	Psychology	32.8
30	Letters	32.4
31	Social Sciences	29.3
32.5	Renewable Natural Resources	27.8
32.5	Philosophy and Religion	27.8
34	Physical Sciences	24.9
35	Life Sciences	24.7
36	Foreign Languages	24.2
37	Area and Ethnic Studies	8.8
38	Law	4.5

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES.

TABLE 2.02

A RANK ORDERING OF BACCALAUREATE DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1982-83 GRADUATES IN THE CIVILIAN LABOR MARKET WHO FOUND FULL-TIME EMPLOYMENT RELATED TO THEIR FIELD OF PREPARATION

RANK	MAJOR DISCIPLINE	PERCENT
1	Military Sciences	100.0*
2	Health Sciences	89.7
3	Allied Health	86.1
4	Vocational Home Economics	81.5
5	Library and Archival Sciences	79.3
6	Precision Production	79.2
7	Agricultural Sciences	76.2
8	Mathematics	75.8
9	Science Technologies	75.0*
10	Engineering	71.5
11	Computer and Information Sciences	70.9
12	Engineering and Engineering-Related Technologies	68.5
13	Business and Office	68.3
14	Architecture and Environmental Design	67.2
15	Business and Management	65.5
16	Home Economics	62.5
17	Agribusiness and Agricultural Production	60.4
18	Marketing and Distribution	57.0
19	Education	56.2
20	Life Sciences	52.0
21	Public Affairs	51.9
22	Theology	51.3
23	Visual and Performing Arts	51.1
24.5	Psychology	50.2
24.5	Physical Sciences	50.2
26	Multi/Interdisciplinary Studies	48.2
27	Liberal/General Studies	47.8
28	Philosophy and Religion	46.1
29	Protective Services	45.5
30	Communications	44.6
31	Letters	43.3
32	Social Sciences	41.4
33	Communications Technologies	40.0*
34	Parks and Recreation	37.5
35	Renewable Natural Resources	37.2
36	Foreign Languages	33.6
37	Area and Ethnic Studies	15.8
38	Law	11.1*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES IN THE CIVILIAN LABOR MARKET.

Inspection of Table 2.02 strongly suggests that the high ranking major disciplines are likely to be those that are highly related to a specific occupation or profession for which the baccalaureate degree tends to be the terminal degree, while the reverse is true for those with lower rankings. The very low ranked major disciplines, however, would seem to be characterized by a currently low degree of labor market demand at this degree level.

Bachelor's Degree Graduates Employed Full-Time in Pennsylvania

Table 2.03 ranks the major discipline fields of Table 2.0 according to the percentage of graduates with full-time employment who found employment in Pennsylvania. The general pattern of Table 2.03 is, as one might expect, one of those disciplines with a strong national labor market ranking lower and those that typically have their graduates employed locally ranking higher. The latter is particularly evident for graduates in the business oriented degree fields and in the health sciences, and for graduates with degrees that are unrelated to specific occupational skills, e.g., Letters, and Liberal/General Studies graduates.

Unemployed Bachelor's Degree Graduates in the Civilian Labor Market

While the general pattern of Table 2.0 is one of baccalaureate graduates finding full-time employment in the civilian labor market, it may be instructive to look at the major discipline fields of Table 2.0 in terms of Civilian Labor Market unemployment rates. Table 2.04, therefore, ranks the major discipline areas of Table 2.0 according to the proportion of graduates in the Civilian Labor Market who were reported as unemployed.

The percentage unemployed figures of Table 2.04 range from 0.0 for general disciplines to a high of 44.4 for baccalaureate graduates who took a degree program in Law. This is not a surprising finding since Law is normally a first-professional degree that requires graduate study, as can be seen in Table 2.05. The disciplines that ranked high in unemployment are a mix of disciplines that have been affected by the economic recession (Engineering and Engineering Related Technologies, Engineering, Marketing and Distribution) and by government funding reductions (Physical Sciences, Life Sciences, Parks and Recreation, Renewable Natural Resources, the Social Sciences) along with those disciplines that do not prepare their graduates for a specific occupation. As might also be expected, low unemployment degree fields tend to be those less affected by economic cycles (Allied Health, Health Sciences, Military Sciences, Philosophy and Religion, Theology) or those which are characterized by fairly steady employment opportunities (Business and Office).

Bachelor's Degree Graduates Pursuing an Advanced Degree

The major discipline areas of Table 2.0 differ widely with respect to the proportion of their graduates going on to obtain an advanced degree. For ease of comparison, Table 2.05 ranks the major disciplines of Table 2.0 on the basis of the proportion of graduates in each major discipline who were reported as pursuing an advanced degree. The disciplines ranking low on Table 2.05 tend to

TABLE 2.03

A RANK ORDERING OF BACCALAUREATE DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF FULL-TIME EMPLOYED 1982-83 GRADUATES WHO FOUND EMPLOYMENT IN PENNSYLVANIA

RANK	MAJOR DISCIPLINE	PERCENT
1	Communications Technologies	100.0*
2	Business and Office	88.4
3	Science Technologies	85.7*
4	Health Sciences	79.5
5	Theology	78.3
6	Public Affairs	77.1
7	Marketing and Distribution	77.0
8	Allied Health	76.6
9	Parks and Recreation	76.0
10	Liberal/General Studies	73.8
11	Agribusiness and Agricultural Production	72.1
12	Protective Services	71.9
13	Psychology	70.6
14	Library and Archival Sciences	69.2
15	Education	68.6
16	Vocational Home Economics	67.6
17	Home Economics	67.5
18	Business and Management	67.4
19.5	Law	66.7*
19.5	Renewable Natural Resources	66.7
21	Communications	66.1
22	Life Sciences	65.8
23	Computer and Information Sciences	62.8
24	Visual and Performing Arts	62.3
25	Agricultural Sciences	60.8
26	Engineering and Engineering-Related Technologies	58.4
27	Social Sciences	57.7
28	Multi/Interdisciplinary Studies	57.6
29	Precision Production	57.1
30	Philosophy and Religion	56.7
31	Physical Sciences	55.8
32	Letters	55.4
33	Foreign Languages	52.7
34	Mathematics	52.2
35	Architecture and Environmental Design	51.0
36	Area and Ethnic Studies	45.5
37	Engineering	37.5
38	Military Sciences	0.0*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES REPORTED AS FULL-TIME EMPLOYED.

TABLE 2.04

A RANK ORDERING OF BACCALAUREATE DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF UNEMPLOYED 1982-83 GRADUATES IN THE CIVILIAN LABOR MARKET

RANK	MAJOR DISCIPLINE	PERCENT
1	Law	44.4*
2	Parks and Recreation	29.2
3	Renewable Natural Resources	28.2
4	Area and Ethnic Studies	26.3
5	Multi/Interdisciplinary Studies	26.1
6	Physical Sciences	25.7
7	Engineering and Engineering-Related Technologies	24.6
8	Foreign Languages	22.1
9	Protective Services	21.8
10	Social Sciences	21.3
11	Engineering	21.1
12	Marketing and Distribution	21.0
13	Life Sciences	20.9
14	Letters	20.4
15	Liberal/General Studies	20.0
16	Public Affairs	18.6
17	Communications	18.4
18	Visual and Performing Arts	17.6
19	Architecture and Environmental Design	17.2
20	Agribusiness and Agricultural Production	17.0
21	Business and Management	16.3
22	Computer and Information Sciences	14.9
23	Psychology	14.1
24	Home Economics	13.6
25	Education	13.0
26	Science Technologies	12.5*
27	Mathematics	12.4
28	Vocational Home Economics	9.9
29	Precision Production	8.3
30	Agricultural Sciences	7.2
31	Theology	6.6
32	Philosophy and Religion	5.8
33	Allied Health	5.2
34	Business and Office	3.7
35	Health Sciences	3.5
36	Military Sciences	0.0*
37	Library and Archival Sciences	0.0
38	Communications Technologies	0.0*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES IN THE CIVILIAN LABOR MARKET.

TABLE 2.05

A RANK ORDERING OF BACCALAUREATE DEGREE MAJOR DISCIPLINES
ACCORDING TO THE PERCENTAGE OF 1982-83 GRADUATES
PURSUING AN ADVANCED DEGREE

RANK	MAJOR DISCIPLINE	PERCENT
1	Law	54.5
2	Life Sciences	50.2
3	Physical Sciences	44.7
4	Philosophy and Religion	37.0
5	Area and Ethnic Studies	32.4
6	Psychology	30.9
7	Foreign Languages	24.7
8	Multi/Interdisciplinary Studies	23.7
9	Social Sciences	23.5
10	Letters	21.0
11	Theology	20.8
12	Liberal/General Studies	18.3
13	Mathematics	17.9
14	Visual and Performing Arts	17.4
15	Renewable Natural Resources	16.8
16	Public Affairs	16.2
17	Protection Services	13.4
18	Health Sciences	12.9
19	Engineering	12.5
20	Vocational Home Economics	12.1
21	Agricultural Sciences	12.0
22	Education	11.7
23	Home Economics	11.4
24	Allied Health	9.7
25	Precision Production	7.7
26	Architecture and Environmental Design	7.1
27	Agribusiness and Agricultural Production	7.0
28	Business and Management	6.6
29	Computer and Information Sciences	5.6
30	Communications	5.4
31	Marketing and Distribution	3.4
32	Library and Archival Sciences	3.3
33	Business and Office	2.3
34	Parks and Recreation	2.0
35	Engineering and Engineering-Related Technologies	1.2
37	Science Technologies	0.0*
37	Military Sciences	0.0*
37	Communications Technologies	0.0*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES.

be occupationally oriented, i.e., toward occupations that do not typically require a degree beyond the baccalaureate, while, as might be expected, the high ranked major disciplines tend to be those that require a graduate degree for degree-related employment.

DETAILED ANALYSES OF SELECTED BACCALAUREATE DEGREE DISCIPLINES

Several of the two-digit level degree discipline categories of Table 2.0 are too generalized for the purposes of this report. A selection of major disciplines from Table 2.0 will now be presented in greater detail using, as needed, four-and six-digit Classification of Instructional Programs (CIP) codes.

Results for Bachelor's Degree Graduates in Agriculture and Renewable Natural Resources

Table 2.06 breaks out the Agriculture and the Renewable Resource categories of Table 2.0 into a variety of more specific degree fields. There are a number of comparisons that could be made between these more specifically defined degree fields, but this report will confine itself only to the rate of full-time degree-related employment in the Civilian Labor Market and the proportion of full-time employed graduates who are employed in Pennsylvania.

In terms of full-time, degree-related, Civilian Labor Market employment, the degree fields of Table 2.06 ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
1	174	Plant Sciences	81.6
2	31	Food Sciences	74.2
3	111	Animal Sciences	72.0
-	479	All Agriculture/Renewable Resources Graduates	68.1
4.5	9	Agricultural Mechanics	66.7
4.5	6	Forestry Production and Processing	66.7
6	32	Agricultural Sciences, General	62.6
7	44	Agricultural Business and Management	59.1
8	21	Forestry and Related Sciences	47.6
9	51	Renewable Natural Resources, General	29.4

The degree field of Wildlife Management has not been included in the above rank order listing because there was only one such graduate reported and that graduate had gone on for an advanced degree.

It is apparent that the graduates in specific agricultural sciences are in high demand with 71 to 82 percent finding degree-related work when they entered the job market. The food processing, general science, and business aspects of agriculture were responsible for substantially less employment along with renewable natural resources areas of employment.

TABLE 2.06

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR BACCALAUREATE GRADUATES IN AGRICULTURE AND RENEWABLE NATURAL RESOURCES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Agribusiness and Agricultural Production	#	57	25	7	6	5	1	9	4	0	0
	%		43.9	12.3	10.5	8.8	1.8	15.8	7.0	.0	.0
	%	53	47.2	13.2	11.3	9.4	1.9	17.0			
Agriculture Business and Management	#	46	20	6	6	5	1	6	2	0	0
	%		43.5	13.0	13.0	10.9	2.2	13.0	4.3	.0	.0
	%	44	45.5	13.6	13.6	11.4	2.3	13.6			
Agricultural Mechanics	#	11	5	1	0	0	0	3	2	0	0
	%		45.5	9.1	.0	.0	.0	27.3	18.2	.0	.0
	%	9	55.6	11.1	.0	.0	.0	33.3			
Agricultural Sciences	#	400	162	103	24	17	17	25	48	1	3
	%		40.5	25.7	6.0	4.2	4.2	6.3	12.0	.2	.7
	%	348	46.6	29.6	6.9	4.9	4.9	7.2			
Agricultural Sciences, General	#	38	14	6	3	2	1	6	6	0	0
	%		36.8	15.8	7.9	5.3	2.6	15.8	15.8	.0	.0
	%	32	43.8	18.8	9.4	6.3	3.1	18.8			
Animal Sciences	#	135	54	26	12	7	5	7	22	0	2
	%		40.0	19.3	8.9	5.2	3.7	5.2	16.3	.0	1.5
	%	111	48.6	23.4	10.8	6.3	4.5	6.3			
Food Sciences	#	32	12	11	2	1	2	3	1	0	0
	%		37.5	34.4	6.3	3.1	6.3	9.4	3.1	.0	.0
	%	31	38.7	35.5	6.5	3.2	6.5	9.7			

TABLE 2.06 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Plant Sciences	#	195	82	60	7	7	9	9	19	1	1
	%		42.1	30.8	3.6	3.6	4.6	4.6	9.7	.5	.5
	%	174	47.1	34.5	4.0	4.0	5.2	5.2			
Renewable Natural Resources	#	101	17	12	17	5	5	22	17	5	1
	%		16.8	11.9	16.8	5.0	5.0	21.8	16.8	4.9	1.0
	%	78	21.8	15.4	21.8	6.4	6.4	28.2			
Renewable Natural Resources, General	#	63	10	5	11	4	2	19	7	4	1
	%		15.9	7.9	17.5	6.3	3.2	30.2	11.1	6.3	1.6
	%	51	19.6	9.8	21.6	7.8	3.9	37.3			
Forestry Production and Processing	#	10	0	4	2	0	0	0	3	1	0
	%		.0	40.0	20.0	.0	.0	.0	30.0	10.0	.0
	%	6	.0	66.7	33.3	.0	.0	.0			
Forestry and Related Sciences	#	27	7	3	4	1	3	3	6	0	0
	%		25.9	11.1	14.8	3.7	11.1	11.1	22.2	.0	.0
	%	21	33.3	14.3	19.0	4.8	14.3	14.3			
Wildlife Management	#	1	0	0	0	0	0	0	1	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
TOTAL	#	558	204	122	47	27	23	56	69	6	4
	%		36.6	21.9	8.4	4.8	4.1	10.0	12.4	1.1	.7
	%	479	42.6	25.5	9.8	5.6	4.8	11.7			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

In terms of the proportion of full-time employed graduates finding employment in Pennsylvania, the following ranking of the degree fields of Table 2.06 resulted.

RANK	N	DEGREE FIELD	PERCENT
1	6	Agricultural Mechanics	83.3
2	15	Forestry and Related Sciences	73.3
3	37	Agricultural Business and Management	70.3
4	30	Renewable Natural Resources, General	70.0
5	25	Agricultural Sciences, General	68.0
6	99	Animal Sciences	66.7
-	400	All Agricultural Science and Renewable Natural Resources Graduates	62.8
7	156	Plant Sciences	57.1
8	26	Food Sciences	53.8
9	6	Forestry Production and Processing	33.3

Results for Bachelor's Degree Graduates in Business, Marketing, and Management

Table 2.07 gives a more detailed breakout of the business-oriented degree fields of Table 2.0. The degree fields of Table 2.07, when ranked according to the rate of full-time, degree-related, Civilian Labor Market employment, appear as follows:

RANK	N	DEGREE FIELD	PERCENT
2.5	2	International Business Management	100.0
2.5	2	Personnel Management	100.0
2.5	6	Small Business Management and Ownership	100.0
2.5	2	Insurance Marketing	100.0
5	11	Business Data Processing and Related Programs	90.9
6	8	Banking and Related Financial Programs	87.5
7	19	Insurance and Risk Management	84.2
8	11	Accounting, Bookkeeping and Related Programs	81.8
9	45	Business and Personal Services Marketing	73.4
10	40	Business and Management, Other	72.5
11	21	Secretarial and Related Programs	71.4
12	27	Food Marketing	70.4
13	131	Management Information Systems	70.2
14	559	Marketing Management and Research	68.7
15	1,414	Business Administration and Management	68.0
16	1,767	Accounting	66.9
-	6,137	All Business, Marketing and Management Graduates	65.1
17	223	Institutional Management	64.6
18	1,119	Business and Management, General	64.1
19	12	Real Estate	58.4
20	35	Apparel and Accessories Marketing	57.0

TABLE 2.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR BACCALAUREATE GRADUATES IN BUSINESS, MARKETING, AND MANAGEMENT, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Business and Management	#	6,260	2,509	1,240	481	206	355	931	415	77	46
	%		40.1	19.8	7.7	3.3	5.7	14.9	6.6	1.2	.7
	%	919	43.8	21.7	8.4	3.6	6.2	16.3			
Business and Management, General	#	1,285	449	269	115	101	61	124	141	18	7
	%		34.9	20.9	8.9	7.9	4.7	9.6	11.0	1.4	.5
	%	1,119	40.1	24.0	10.3	9.0	5.5	11.1			
Accounting	#	1,893	823	358	139	24	106	317	92	19	15
	%		43.5	18.9	7.3	1.3	5.6	16.7	4.9	1.0	.8
	%	1,767	46.6	20.3	7.9	1.4	6.0	17.9			
Banking and Finance	#	338	98	55	26	15	21	92	28	3	0
	%		29.0	16.3	7.7	4.4	6.2	27.2	8.3	.9	.0
	%	307	31.9	17.9	8.5	4.9	6.8	30.0			
Business Administration and Management	#	1,534	701	260	116	40	95	202	79	27	14
	%		45.7	16.9	7.6	2.6	6.2	13.2	5.1	1.8	.9
	%	1,414	49.6	18.4	8.2	2.8	6.7	14.3			
Business Economics	#	74	17	9	11	6	4	11	14	1	1
	%		23.0	12.2	14.9	8.1	5.4	14.9	18.9	1.4	1.4
	%	58	29.3	15.5	19.0	10.3	6.9	19.0			
Institutional Management	#	232	66	78	19	5	8	47	5	4	0
	%		28.4	33.6	8.2	2.2	3.4	20.3	2.2	1.7	.0
	%	223	29.6	35.0	8.5	2.2	3.6	21.1			

TABLE 2.07 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Insurance and Risk Management	#	19	10	6	1	1	0	1	0	0	0
	%		52.6	31.6	5.3	5.3	.0	5.3	.0	.0	.0
	%	19	52.6	31.6	5.3	5.3	.0	5.3			
International Business Management	#	2	1	1	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0			
Labor/Industrial Relations	#	35	5	1	6	2	3	7	9	1	1
	%		14.3	2.9	17.1	5.7	8.6	20.0	25.7	2.9	2.9
	%	24	20.8	4.2	25.0	8.3	12.5	29.2			
Management Information Systems	#	137	52	40	8	1	6	24	2	1	3
	%		38.0	29.2	5.8	.7	4.4	17.5	1.5	.7	2.2
	%	131	39.7	30.5	6.1	.8	4.6	18.3			
Management Science	#	45	14	8	3	0	2	12	5	1	0
	%		31.1	17.8	6.7	.0	4.4	26.7	11.1	2.2	.0
	%	39	35.9	20.5	7.7	.0	5.1	30.8			
Marketing Management and Research	#	597	245	139	33	10	43	89	31	2	5
	%		41.0	23.3	5.5	1.7	7.2	14.9	5.2	.3	.8
	%	559	43.8	24.9	5.9	1.8	7.7	15.9			
Personnel Management	#	2	1	1	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0			
Real Estate	#	12	5	2	2	1	1	1	0	0	0
	%		41.7	16.7	16.7	8.3	8.3	.0	.0	.0	.0
	%	12	41.7	16.7	16.7	8.3	8.3	8.3			

TABLE 2.07 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Small Business Management and Ownership	#	6	5	1	0	0	0	0	0	0	0
	%		83.3	16.7	.0	.0	.0	.0	.0	.0	.0
	%	6	83.3	16.7	.0	.0	.0	.0			
Business and Management, Other	#	49	17	12	2	0	5	4	9	0	0
	%		34.7	24.5	4.1	.0	10.2	8.2	18.4	.0	.0
	%	40	42.5	30.0	5.0	.0	12.5	10.0			
Business and Office	#	87	49	7	12	1	10	3	2	1	2
	%		56.3	8.0	13.8	1.1	11.5	3.4	2.3	1.1	2.3
	%	82	59.8	8.5	14.6	1.2	12.2	3.7			
Accounting, Bookkeeping and Related Programs	#	11	8	1	0	0	2	0	0	0	0
	%		72.7	9.1	.0	.0	18.2	.0	.0	.0	.0
	%	11	72.7	9.1	.0	.0	18.2	.0			
Banking and Related Financial Programs	#	8	7	0	0	0	1	0	0	0	0
	%		87.5	.0	.0	.0	12.5	.0	.0	.0	.0
	%	8	87.5	.0	.0	.0	12.5	.0			
Business Data Processing and Related Programs	#	11	8	2	0	1	0	0	0	0	0
	%		72.7	18.2	.0	9.1	.0	.0	.0	.0	.0
	%	11	72.7	18.2	.0	9.1	.0	.0			
Office Supervision and Management	#	35	13	2	8	0	5	3	1	1	2
	%		31.7	5.7	22.9	.0	14.3	8.6	2.9	2.9	5.7
	%	31	41.9	6.5	25.8	.0	16.1	9.7			
Secretarial and Related Programs	#	22	13	2	4	0	2	0	1	0	0
	%		59.1	9.1	18.2	.0	9.1	.0	4.5	.0	.0
	%	21	61.9	9.5	19.0	.0	9.5	.0			

TABLE 2.07 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Marketing and Distribution	#	351	144	46	23	4	46	70	12	3	3
	%		41.0	13.1	6.6	1.1	13.1	19.9	3.4	.9	.9
	%	333	43.2	13.8	6.9	1.2	13.8	21.0			
Apparel and Accessories Marketing	#	37	18	11	1	2	0	3	0	0	2
	%		48.6	29.7	2.7	5.4	.0	8.1	.0	.0	5.4
	%	35	51.4	31.4	2.9	5.7	.0	8.6			
Business and Personal Services Marketing	#	50	17	16	1	1	3	7	4	1	0
	%		34.0	32.0	2.0	2.0	6.0	14.0	8.0	2.0	.0
	%	45	37.8	35.6	2.2	2.2	6.7	15.6			
Food Marketing	#	28	19	0	3	0	0	5	0	1	0
	%		67.9	.0	10.7	.0	.0	17.9	.0	3.6	.0
	%	27	70.4	.0	11.1	.0	.0	18.5			
General Marketing	#	234	88	19	18	1	43	55	8	1	1
	%		37.6	8.1	7.7	.4	18.4	23.5	3.4	.4	.4
	%	224	39.3	8.5	8.0	.4	19.2	24.6			
Insurance Marketing	#	2	2	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	2	100.0	.0	.0	.0	.0	.0			
TOTAL	#	6,698	2,702	1,293	516	211	411	1,004	429	81	51
	%		40.3	19.3	7.7	3.2	6.1	15.0	6.4	1.2	.8
	%	6,137	44.0	21.1	8.4	3.4	6.7	16.4			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

21	39	Management Science	56.4
22	307	Banking and Finance	49.8
23	31	Office Supervision and Management	48.4
24	224	General Marketing	47.8
25	58	Business Economics	44.8
26	24	Labor/Industrial Relations	25.0

In terms of the proportion of full-time employed graduates finding full-time employment in Pennsylvania, the degree fields of Table 2.07 were ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
2	2	Insurance Marketing	100.0
2	7	Banking and Related Financial Programs	100.0
2	22	Food Marketing	100.0
4	23	Office Supervision and Management	91.3
5	19	Secretarial and Related Programs	89.5
6	9	Accounting, Bookkeeping, and Related Programs	88.9
7	126	General Marketing	84.1
8	6	Small Business Management and Ownership	83.3
9	14	Labor/Industrial Relations	78.6
10	1,117	Business Administration and Management	73.1
11	11	Business Data Processing and Related Programs	72.7
12	1,344	Accounting	71.6
13	10	Real Estate	70.0
-	4,722	All Business, Marketing, and Management Graduates	68.1
14	25	Management Science	68.0
15.5	427	Marketing Management and Research	65.1
15.5	43	Business Economics	65.1
17	194	Banking and Finance	63.9
18	31	Business and Management, Other	61.3
19	18	Insurance and Risk Management	61.1
20	934	Business and Management, General	60.4
21	101	Management Information Systems	59.4
22	32	Apparel and Accessories Marketing	54.9
23	35	Business and Personnel Services Marketing	51.4
24	168	Institutional Management	50.6
25.5	2	International Business Management	50.0
25.5	2	Personnel Management	50.0

Results for Bachelor's Degree Graduates in Education

Table 2.08 gives a detailed breakout of significant degree fields for Pennsylvania's reported baccalaureate degree graduates in Education. As before, there are many possible analyses of these data that could be made but this report will look only at the full-time, degree-related employment of graduates in the Civilian Labor Market and the proportion of full-time employed graduates who found full-time employment in Pennsylvania.

TABLE 2.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR BACCALAUREATE GRADUATES IN EDUCATION, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Education, General	#	73	19	6	3	1	6	24	11	0	3
	%		26.0	8.2	4.1	1.4	8.2	32.9	15.1	.0	4.1
	%	59	32.2	10.2	5.1	1.7	10.2	40.7			
Special Education	#	740	229	177	37	9	79	61	139	1	8
	%		30.9	23.9	5.0	1.2	10.7	8.2	18.8	.1	1.1
	%	592	38.7	29.9	6.3	1.5	13.3	10.3			
Special Education, General	#	368	133	96	18	5	52	32	28	0	4
	%		36.1	26.1	4.9	1.4	14.1	8.7	7.6	.0	1.1
	%	336	39.6	28.6	5.4	1.5	15.5	9.5			
Education of the Deaf and Hearing Impaired	#	10	1	6	1	0	0	1	1	0	0
	%		10.0	60.0	10.0	.0	.0	10.0	10.0	.0	.0
	%	9	11.1	66.7	11.1	.0	.0	11.1			
Education of the Mentally Handicapped	#	38	10	17	0	0	3	6	2	0	0
	%		26.3	44.7	.0	.0	7.9	15.8	5.3	.0	.0
	%	36	27.8	47.2	.0	.0	8.3	16.7			
Education of the Multiple Handicapped	#	48	24	10	5	0	6	1	1	0	1
	%		50.0	20.8	10.4	.0	12.5	2.1	2.1	.0	2.1
	%	46	52.2	21.7	10.9	.0	13.0	2.2			
Education of the Physically Handicapped	#	13	5	3	0	0	1	2	1	0	1
	%		38.5	23.1	.0	.0	7.7	15.4	7.7	.0	7.7
	%	11	45.5	27.3	.0	.0	9.1	18.2			

TABLE 2.08 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Education of the Visually Handicapped	#	22	5	10	0	1	2	1	3	0	0
	%		22.7	45.5	.0	4.5	9.1	4.5	13.6	.0	.0
	%	19	26.3	52.6	.0	5.3	10.5	5.3			
Speech Correction	#	137	13	23	8	3	8	8	73	1	0
	%		9.5	16.8	5.8	2.2	5.8	5.8	53.3	.7	.0
	%	63	20.6	36.5	12.7	4.8	12.7	12.7			
Special Education, Other	#	104	38	12	5	0	7	10	30	0	2
	%		36.5	11.5	4.8	.0	6.7	9.6	28.8	.0	1.9
	%	72	52.8	16.7	6.9	.0	9.7	13.9			
Teacher Education, General Programs	#	1,162	400	171	102	28	206	144	95	1	15
	%		34.4	14.7	8.8	2.4	17.7	12.4	8.2	.1	1.3
	%	1,051	38.1	16.3	9.7	2.7	19.6	13.7			
Elementary Education	#	934	307	136	88	22	173	115	79	1	13
	%		32.9	14.6	9.4	2.4	18.5	12.3	8.5	.1	1.4
	%	841	36.5	16.2	10.5	2.6	20.6	13.7			
Pre-Elementary Education	#	16	7	2	3	0	2	2	0	0	0
	%		43.8	12.5	18.8	.0	12.5	12.5	.0	.0	.0
	%	16	43.8	12.5	18.8	.0	12.5	12.5			
Secondary Education	#	37	16	5	2	0	5	2	7	0	0
	%		43.2	13.5	5.4	.0	13.5	5.4	18.9	.0	.0
	%	30	53.3	16.7	6.7	.0	16.7	6.7			
Early Childhood Education	#	175	70	28	9	6	26	25	9	0	2
	%		40.0	16.0	5.1	3.4	14.9	14.3	5.1	.0	1.1
	%	164	42.7	17.1	5.5	3.7	15.9	15.2			

TABLE 2.08 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Teacher Education, Specific Subjects	#	1,023	307	145	123	32	182	110	104	10	10
	%		30.0	14.2	12.0	3.1	17.8	10.8	10.2	1.0	1.0
	%	899	34.1	16.1	13.7	3.6	20.2	12.2			
Agricultural Education	#	20	8	2	3	2	2	2	1	0	0
	%		40.0	10.0	15.0	10.0	10.0	10.0	5.0	.0	.0
	%	19	42.1	10.5	15.8	10.5	10.5	10.5			
Art Education	#	108	31	8	18	4	29	8	6	1	3
	%		28.7	7.4	16.7	3.7	26.9	7.4	5.6	.9	2.8
	%	98	31.6	8.2	18.4	4.1	29.6	8.2			
Business Education	#	65	29	3	17	5	3	5	3	0	0
	%		44.6	4.6	26.2	7.7	4.6	7.7	4.6	.0	.0
	%	62	46.8	4.8	27.4	8.1	4.8	8.1			
English Education	#	38	10	5	3	3	7	3	7	0	0
	%		26.3	13.2	7.9	7.9	18.4	7.9	18.4	.0	.0
	%	31	32.3	16.1	9.7	9.7	22.6	9.7			
Foreign Languages Education	#	10	2	1	3	1	2	1	0	0	0
	%		20.0	10.0	30.0	10.0	20.0	10.0	.0	.0	.0
	%	10	20.0	10.0	30.0	10.0	20.0	10.0			
Health Education	#	8	2	1	1	0	1	0	3	0	0
	%		25.0	12.5	12.5	.0	12.5	.0	37.5	.0	.0
	%	5	40.0	20.0	20.0	.0	20.0	.0			
Home Economics Education	#	24	10	6	3	0	3	0	2	0	0
	%		41.7	25.0	12.5	.0	12.5	.0	8.3	.0	.0
	%	22	45.5	27.3	13.6	.0	13.6	.0			

TABLE 2.08 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Industrial Arts Education	#	51	26	8	8	1	1	3	4	0	0
	%		51.0	15.7	15.7	2.0	2.0	5.9	7.8	.0	.0
	%	47	55.3	17.0	17.0	2.1	2.1	6.4			
Marketing and Distributive Education	#	5	1	1	3	0	0	0	0	0	0
	%		20.0	20.0	60.0	.0	.0	.0	.0	.0	.0
	%	5	20.0	20.0	60.0	.0	.0	.0			
Mathematics Education	#	31	15	9	2	0	2	1	1	0	1
	%		48.4	29.0	6.5	.0	6.5	3.2	3.2	.0	3.2
	%	29	51.7	31.0	6.9	.0	6.9	3.4			
Music Education	#	149	44	27	13	2	21	17	24	1	0
	%		29.5	18.1	8.7	1.3	14.1	11.4	16.1	.7	.0
	%	124	35.5	21.8	10.5	1.6	16.9	13.7			
Physical Education	#	128	15	16	15	3	33	21	22	1	2
	%		11.7	12.5	11.7	2.3	25.8	16.4	17.2	.8	1.6
	%	103	14.6	15.5	14.6	2.9	32.0	20.4			
Science Education	#	20	9	5	1	1	2	1	1	0	0
	%		45.0	25.0	5.0	5.0	10.0	5.0	5.0	.0	.0
	%	19	47.4	26.3	5.3	5.3	10.5	5.3			
Social Science Education	#	4	1	0	1	0	0	0	0	0	2
	%		25.0	.0	25.0	.0	.0	.0	.0	.0	50.0
	%	2	50.0	.0	50.0	.0	.0	.0			
Social Studies Education	#	71	11	7	10	2	18	13	7	2	1
	%		15.5	9.9	14.1	2.8	25.4	18.3	9.9	2.8	1.4
	%	61	18.0	11.5	16.4	3.3	29.5	21.3			

TABLE 2.08 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Trade and Industrial Education	#	2	2	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	2	100.0	.0	.0	.0	.0	.0			
Nursing Education	#	79	66	9	2	0	0	1	0	0	1
	%		83.5	11.4	2.5	.0	.0	1.3	.0	.0	1.3
	%	78	84.6	11.5	2.6	.0	.0	1.3			
Physics/Math Education	#	2	2	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	2	100.0	.0	.0	.0	.0	.0			
Dental Hygiene Education	#	2	2	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	2	100.0	.0	.0	.0	.0	.0			
Environmental Education	#	1	0	0	0	0	1	0	0	0	0
	%		.0	.0	.0	.0	100.0	.0	.0	.0	.0
	%	1	.0	.0	.0	.0	100.0	.0			
Health, Physical, and Recreational Education	#	204	21	37	19	8	57	34	23	5	0
	%		10.3	18.1	9.3	3.9	27.9	16.7	11.3	2.5	.0
	%	176	11.9	21.0	10.8	4.5	32.4	19.3			
Physical Education and Sports Education	#	1	0	0	1	0	0	0	0	0	0
	%		.0	.0	100.0	.0	.0	.0	.0	.0	.0
	%	1	.0	.0	100.0	.0	.0	.0			
Teaching English as a Second Language/Foreign Language	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			

TABLE 2.08 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Education, Other	#	57	30	4	1	1	5	5	10	0	1
	%		52.6	7.0	1.8	1.8	8.8	8.8	17.5	.0	1.8
	%	46	65.2	8.7	2.2	2.2	10.9	10.9			
TOTAL	#	3,056	986	503	266	71	478	344	359	12	37
	%		32.3	16.5	8.7	2.3	15.6	11.3	11.7	.4	1.2
	%	2,648	37.2	19.0	10.0	2.7	18.1	13.0			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

When the degree fields of Table 2.08 are ranked according to their rate of full-time, degree-related, Civilian Labor Market employment, the results are as follows:

RANK	N	DEGREE FIELD	PERCENT
2.5	2	Trade and Industrial Education	100.0
2.5	2	Physics/Mathematics Education	100.0
2.5	2	Dental Hygiene Education	100.0
2.5	1	Teaching English as a Second Language/ Foreign Language	100.0
5	78	Nursing Education	96.1
6	29	Mathematics Education	82.7
7	19	Education of the Visually Handicapped	78.9
8	9	Education of the Deaf and Hearing Impaired	77.8
9	36	Education of the Mentally Handicapped	75.0
10.5	46	Education of the Multiple Handicapped	73.9
10.5	46	Education, Other	73.9
12	19	Science Education	73.7
13.5	11	Education of the Physically Handicapped	72.8
13.5	22	Home Economics Education	72.8
15	47	Industrial Arts Education	72.3
16	30	Secondary Education	70.0
17	72	Special Education, Other	69.5
18	336	Special Education, General	68.2
19	5	Health Education	60.0
20	164	Early Childhood Education	59.8
21	124	Music Education	57.3
22	63	Speech Correction	57.1
23	16	Pre-Elementary Education	56.3
-	2,648	All Education Graduates	56.2
24	841	Elementary Education	52.7
25	19	Agricultural Education	52.6
26	62	Business Education	51.6
27	2	Social Science Education	50.0
28	31	English Education	48.4
29	59	Education, General	42.4
30	5	Marketing and Distributive Education	40.0
31	98	Art Education	39.8
32	176	Health, Physical, and Recreational Education	39.7
33	103	Physical Education	30.1
34	10	Foreign Language Education	30.0
35	61	Social Studies Education	29.5
36	1	Physical Education and Sports Education	0.0
37	1	Environmental Education	0.0

In terms of the proportion of full-time employed baccalaureate graduates who obtained full-time employment in Pennsylvania, the degree fields of Table 2.08 were ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
3.5	2	Social Science Education	100.0
3.5	2	Trade and Industrial Education	100.0
3.5	2	Physics/Math Education	100.0
3.5	2	Dental Hygiene Education	100.0
3.5	1	Physical Education and Sports Education	100.0
3.5	1	Teaching English as a Second Language/ Foreign Language	100.0
7	77	Nursing Education	88.3
8	36	Education, Other	86.1
9	54	Business Education	85.2
10	12	Pre-Elementary Education	83.3
11	61	Art Education	80.3
12	5	Marketing and Distributive Education	80.0
13	43	Industrial Arts Education	79.1
14	23	Secondary Education	78.6
15	55	Special Education, Other	78.2
16	29	Education, General	75.9
17	4	Health Education	75.0
18	39	Education of the Multiple Handicapped	74.4
19	15	Agricultural Education	73.3
20.5	553	Elementary Education	71.4
20.5	7	Foreign Language Education	71.4
22	30	Social Studies Education	70.0
23	113	Early Childhood Education	69.9
-	1,826	All Education Graduates	68.6
24	19	Home Economic Education	68.4
25	86	Music Education	66.3
26	26	Mathematics Education	65.4
27.5	8	Education of the Physically Handicapped	62.5
27.5	16	Science Education	62.5
29	21	English Education	61.9
30	49	Physical Education	61.2
31	252	Special Education, General	59.9
32	85	Health, Physical, and Recreational Education	47.1
33	47	Speech Correction	44.7
34	27	Education of the Mentally Handicapped	37.0
35	16	Education of the Visually Handicapped	31.3
36	8	Education of the Deaf and Hearing Impaired	25.0

Examination of the above two tables suggests that several conclusions can be drawn. For example, the graduate in Special Education tends to find degree-related employment, but not necessarily in Pennsylvania. Also, graduates with degrees in Physics and Mathematics Education are readily able to find degree-related employment in Pennsylvania. Graduates in Nursing Education have little difficulty finding degree-related employment in Pennsylvania. This confirms the general opinion that nurse educators are in short supply in Pennsylvania as well as nationally. Care must be exercised in interpreting these rankings, or any of the other rankings in this report, since the very high or very low ranked degree fields may have had few reported graduates.

Results for Bachelor's Degree Graduates in Engineering

Table 2.09 gives a detailed degree field breakout of the major discipline of Engineering that is found in Table 2.0.

When the Engineering degree fields of Table 2.09 were compared with regard to the proportion of engineering graduates in the Civilian Labor Market who found degree-related employment, the following rank order listing resulted:

RANK	N	DEGREE FIELD	PERCENT
1.5	1	Engineering Physics	100.0
1.5	9	Textile Engineering	100.0
3	283	Electrical, Electronic and Communications Engineering	92.6
4	50	Architectural Engineering	90.0
5	15	Nuclear Engineering	86.6
6	25	Engineering, Other	84.0
7	56	General Engineering	83.9
8	139	Civil Engineering	77.0
-	1,405	All Engineering Graduates	71.5
10	28	Engineering Science	71.4
11	32	Aerospace, Aeronautical and Astronautical Engineering	68.8
12	44	Metallurgical Engineering	68.2
13	81	Industrial Engineering	58.0
14	208	Chemical Engineering	55.3
15.5	16	Ceramic Engineering	50.0
15.5	12	Materials Engineering	50.0
17	46	Mining and Mineral Engineering	47.8
18	61	Petroleum Engineering	42.6
19	24	Environmental Health Engineering	41.7
20	14	Agricultural Engineering	14.2

Since engineering is a discipline characterized by a national or even international labor market, we can expect to find a relatively low incidence of Pennsylvania employment. As can be seen below, this is indeed the case when we inspect the results of ranking these degree fields according to the proportion of Pennsylvania based employment found among full-time employed graduates in Engineering.

RANK	N	DEGREE FIELD	PERCENT
1	1	Engineering Physics	100.0
2	202	Mechanical Engineering	74.1
3	22	Engineering, Other	72.7
4	6	Agricultural Engineering	66.7
5	13	Nuclear Engineering	61.5
6	29	Mining and Mineral Engineering	58.6
7	47	Engineering, General	53.2
8	12	Environmental Health Engineering	41.7
9	33	Metallurgical Engineering	39.4

TABLE 2.09

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR BACCALAUREATE GRADUATES IN ENGINEERING, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Engineering, General	#	56	25	22	0	0	0	9	9	0	0
	%		44.6	39.3	.0	.0	.0	16.1	.0	.0	.0
	%	56	44.6	39.3	.0	.0	.0	16.1			
Aerospace, Aeronautical, and Astronautical Engineering	#	49	6	16	0	1	0	9	3	14	0
	%		12.2	32.7	.0	2.0	.0	18.4	6.1	28.6	.0
	%	32	18.8	50.0	.0	3.1	.0	28.1			
Agricultural Engineering	#	17	1	1	3	1	1	7	2	1	0
	%		5.9	5.9	17.6	5.9	5.9	41.2	11.8	5.9	.0
	%	14	7.1	7.1	21.4	7.1	7.1	50.0			
Architectural Engineering	#	52	11	34	2	0	0	3	1	1	0
	%		21.2	65.4	3.8	.0	.0	5.8	1.9	1.9	.0
	%	50	22.0	68.0	4.0	.0	.0	6.0			
Ceramic Engineering	#	24	2	6	0	2	0	6	7	1	0
	%		8.3	25.0	.0	8.3	.0	25.0	29.2	4.2	.0
	%	16	12.5	37.5	.0	12.5	.0	37.5			
Chemical Engineering	#	267	39	76	12	9	5	67	48	9	2
	%		14.6	28.5	4.5	3.4	1.9	25.1	18.0	3.4	.7
	%	208	18.8	36.5	5.8	4.3	2.4	32.2			
Civil Engineering	#	171	39	68	2	3	5	22	18	14	0
	%		22.8	39.8	1.2	1.8	2.9	12.9	10.5	8.2	.0
	%	139	28.1	48.9	1.4	2.2	3.6	15.8			

TABLE 2.09 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Electrical, Electronics, and Communications Engineering	#	357	84	178	1	2	0	18	42	32	0
	%		23.5	49.9	.3	.6	.0	5.0	11.8	9.0	.0
	%	283	29.7	62.9	.4	.7	.0	6.4			
Engineering Physics	#	5	1	0	0	0	0	0	3	1	0
	%		20.0	.0	.0	.0	.0	.0	60.0	20.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
Engineering Science	#	42	6	14	2	2	0	4	12	1	1
	%		14.3	33.3	4.8	4.8	.0	9.5	28.6	2.4	2.4
	%	28	21.4	50.0	7.1	7.1	.0	14.3			
Environmental Health Engineering	#	26	4	6	1	1	4	8	2	0	0
	%		15.4	23.1	3.8	3.8	15.4	30.8	7.7	.0	.0
	%	24	16.7	25.0	4.2	4.2	16.7	33.3			
Industrial Engineering	#	99	14	33	7	5	0	22	10	8	0
	%		14.1	33.3	7.1	5.1	.0	22.2	10.1	8.1	.0
	%	81	17.3	40.7	8.6	6.2	.0	27.2			
Materials Engineering	#	18	2	4	0	0	0	6	6	0	0
	%		11.1	22.2	.0	.0	.0	33.3	33.3	.0	.0
	%	12	16.7	33.3	.0	.0	.0	50.0			
Mechanical Engineering	#	318	78	114	8	2	4	55	43	13	1
	%		24.5	35.8	2.5	.6	1.3	17.3	13.5	4.1	.3
	%	261	29.9	43.7	3.1	.8	1.5	21.1			
Metallurgical Engineering	#	61	11	19	2	1	1	10	10	3	4
	%		18.0	31.1	3.3	1.6	1.6	16.4	16.4	4.9	6.6
	%	44	25.0	43.2	4.5	2.3	2.3	22.7			

TABLE 2.09 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Mining and Mineral Engineering	#	50	12	10	5	2	1	16	2	1	1
	%		24.0	20.0	10.0	4.0	2.0	32.0	4.0	2.0	2.0
	%	46	26.1	21.7	10.9	4.3	2.2	34.8			
Nuclear Engineering	#	20	8	5	0	0	0	2	2	3	0
	%		40.0	25.0	.0	.0	.0	10.0	10.0	15.0	.0
	%	15	53.3	33.3	.0	.0	.0	13.3			
Petroleum Engineering	#	67	2	24	2	4	0	29	4	2	0
	%		3.0	35.8	3.0	6.0	.0	43.3	6.0	3.0	.0
	%	61	3.3	39.3	3.3	6.6	.0	47.5			
Textile Engineering	#	9	0	9	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	9	.0	100.0	.0	.0	.0	.0			
Engineering, Other	#	29	15	6	1	0	0	3	2	2	0
	%		51.7	20.7	3.4	.0	.0	10.3	6.9	6.9	.0
	%	25	60.0	24.0	4.0	.0	.0	12.0			
TOTAL	#	1,737	360	645	48	35	21	296	217	106	9
	%		20.7	37.1	2.8	2.0	1.2	17.0	12.5	6.1	.5
	%	1,405	25.6	45.9	3.4	2.5	1.5	21.1			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

-	1,088	All Engineering Graduates	37.5
10	136	Chemical Engineering	37.5
11	112	Civil Engineering	36.6
12	59	Industrial Engineering	35.6
13.5	24	Engineering Science	33.3
13.5	6	Materials Engineering	33.3
15	265	Electrical, Electronics, and Communications Engineering	32.1
16	47	Architectural Engineering	27.8
17	23	Aerospace, Aeronautical, and Astronautical Engineering	26.1
18	10	Ceramic Engineering	20.0
19	32	Petroleum Engineering	12.5
20	9	Textile Engineering	0.0

It is evident that engineering graduates are responding primarily to national, or even international, labor market demand rather than to local demand.

Results for Bachelor's Degree Graduates in the Engineering and Engineering-Related Technologies

Table 2.10 presents a detailed breakout of the findings for baccalaureate graduates in the major discipline area (Table 2.0) of Engineering and Engineering-Related Technologies.

When a comparison was made between the degree fields of Table 2.10 with regard to the proportion of graduates in the Civilian Labor Market who have found degree-related, full-time employment, the results were as follows:

RANK	N	DEGREE FIELD	PERCENT
1	1	Civil Technologies	100.0
2	62	Electrical and Electronic Technologies	79.0
3	25	Engineering and Engineering-Related Technologies, Other	76.0
4	49	Industrial Production Technologies	73.4
-	244	All Engineering and Engineering-Related Technologies	68.5
5	47	Mechanical and Related Technologies	63.9
6	15	Environmental Control Technologies	60.0
7	45	Quality Control and Safety Technologies	51.1

It should be noted here that there was only one graduate in the field of Mining and Petroleum Technologies and that that individual had opted for advanced degree work. This category does not, therefore, appear on the above listing.

TABLE 2.10

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR BACCALAUREATE GRADUATES IN THE ENGINEERING AND ENGINEERING-RELATED TECHNOLOGIES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Civil Technologies	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
Electrical and Electronic Technologies	#	63	22	27	0	1	0	12	0	0	1
	%		34.9	42.9	.0	1.6	.0	19.0	.0	.0	1.6
	%	62	35.5	43.5	.0	1.6	.0	19.4			
Environmental Control Technologies	#	15	7	2	2	2	0	2	0	0	0
	%		46.7	13.3	13.3	13.3	.0	13.3	.0	.0	.0
	%	15	46.7	13.3	13.3	13.3	.0	13.3			
Industrial Production Technologies	#	50	25	11	1	0	0	12	0	0	1
	%		50.0	22.0	2.0	.0	.0	24.0	.0	.0	2.0
	%	49	51.0	22.4	2.4	.0	.0	24.5			
Quality Control and Safety Technologies	#	47	14	9	0	0	6	16	1	1	0
	%		29.8	19.1	.0	.0	12.8	34.0	2.1	2.1	.0
	%	45	31.1	20.0	.0	.0	13.3	35.6			
Mechanical and Related Technologies	#	48	17	13	2	1	0	14	1	0	0
	%		35.4	27.1	4.2	2.1	.0	29.2	2.1	.0	.0
	%	47	36.2	27.7	4.3	2.1	.0	29.8			
Mining and Petroleum Technologies	#	1	0	0	0	0	0	0	1	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			

TABLE 2.10 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Engineering and Engineering Related Technologies, Other	#	25	12	7	2	0	0	4	0	0	0
	%		48.0	28.0	8.0	.0	.0	16.0	.0	.0	.0
	%	25	48.0	28.0	8.0	.0	.0	16.0			
TOTAL	#	250	97	70	7	4	6	60	3	1	2
	%		38.8	28.0	2.8	1.6	2.4	24.0	1.2	.4	.8
	%	244	39.8	28.7	2.9	1.6	2.5	24.6			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

When the degree fields of Table 2.10 were compared with regard to the proportion of full-time employed graduates finding employment in Pennsylvania, the results were as follows:

RANK	N	DEGREE FIELD	PERCENT
1	37	Industrial Production Technologies	70.3
2	13	Environmental Control Technologies	69.2
3	21	Engineering and Engineering-Related Technologies, Other	66.7
4	23	Quality Control and Safety Technologies	60.9
-	178	All Engineering and Engineering-Related Technologies Graduates	58.4
5	33	Mechanical and Related Technologies	57.6
6	50	Electrical and Electronic Technologies	44.9
7	1	Civil Technologies	0.0

In contrast to the findings of Table 2.09 for Engineers, the data in Table 2.10 show that there is a definite tendency for graduates in the engineering and engineering-related technologies to find Pennsylvania based, degree-related employment.

Results for Bachelor's Degree Graduates in the Allied Health Professions

Table 2.11 gives detailed information about baccalaureate degree graduates in the disciplines referred to collectively in Table 2.0 as Allied Health Professions. A scanning of Table 2.11 indicates that graduates in this area tend to obtain degree-related employment, with the possible exception of graduates in Nursing-related Services, Other, and graduates in Music Therapy. Some of the Allied Health degree fields had a substantial number of their graduates pursuing an advanced degree, e.g., Diagnostic and Treatment Services, Other; Chemistry Technology; Mental Health/Human Services, Other; Art Therapy, and Music Therapy.

When the Allied Health degree fields of Table 2.11 were compared with regard to the proportion of full-time employed baccalaureate graduates who found degree-related employment in the Civilian Labor Market, the results were as follows:

RANK	N	DEGREE FIELD	PERCENT
4.5	1	Dental Assisting	100.0
4.5	2	Nuclear Medical Technology	100.0
4.5	7	Cytotechnology	100.0
4.5	2	Hematology Technology	100.0
4.5	1	Genetic Counseling	100.0
4.5	2	Human Services Technologies	100.0
45.	4	Habilitative Services	100.0
4.5	25	Occupational Therapy	100.0
4.5	19	Respiratory Therapy	100.0

TABLE 2.11

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR BACCALAUREATE GRADUATES IN THE ALLIED HEALTH PROFESSIONS, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Dental Assisting	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
Dental Hygiene	#	20	12	4	2	0	1	0	1	0	0
	%		60.0	20.0	10.0	.0	5.0	.0	5.0	.0	.0
	%	19	63.2	21.1	10.5	.0	5.3	.0			
Nuclear Medical Technology	#	2	2	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	2	100.0	.0	.0	.0	.0	.0			
Radiograph Medical Technology	#	12	7	3	0	0	0	1	1	0	0
	%		58.3	25.0	.0	.0	.0	8.3	8.3	.0	.0
	%	11	63.6	27.3	.0	.0	.0	9.1			
Diagnostic and Treatment Services, Other	#	1	0	0	0	0	0	0	1	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
Chemistry Technology	#	10	0	0	0	0	0	0	10	.0	.0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
Cytotechnology	#	7	4	3	0	0	0	0	0	0	0
	%		57.1	42.9	.0	.0	.0	.0	.0	.0	.0
	%	7	57.1	42.9	.0	.0	.0	.0			

TABLE 2.11 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Hematology Technology	#	2	0	2	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	2	.0	100.0	.0	.0	.0	.0			
Medical Laboratory Technology	#	11	4	1	0	0	0	1	5	0	0
	%		36.4	9.1	.0	.0	.0	9.1	45.5	.0	.0
	%	6	66.7	16.7	.0	.0	.0	16.7			
Medical Technology	#	150	119	8	4	1	3	6	6	0	3
	%		79.3	5.3	2.7	.7	2.0	4.0	4.0	.0	2.0
	%	141	84.4	5.7	2.8	.7	2.1	4.3			
Genetic Counseling	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
Mental Health/ Human Services Technology	#	20	11	1	0	0	3	2	3	0	0
	%		55.0	5.0	.0	.0	15.0	10.0	15.0	.0	.0
	%	17	64.7	5.9	.0	.0	17.6	11.8			
Human Services Technologies	#	2	2	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	2	100.0	.0	.0	.0	.0	.0			
Habilitative Services	#	4	2	2	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	4	50.0	50.0	.0	.0	.0	.0			
Mental Health/ Human Services, Other	#	18	10	4	0	0	0	4	0	0	0
	%		55.6	22.2	.0	.0	.0	22.2	.0	.0	.0
	%	18	55.6	32.2	.0	.0	.0	22.2			

TABLE 2.11 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Physician Assisting - Primary Care	#	48	25	20	0	0	0	3	0	0	0
	%		52.1	41.7	.0	.0	.0	6.3	.0	.0	.0
	%	48	52.1	41.7	.0	.0	.0	6.3			
Nursing-Related Services, Other	#	47	35	7	0	0	0	1	0	1	3
	%		74.5	14.9	.0	.0	.0	2.1	.0	2.1	6.4
	%	43	81.4	16.3	.0	.0	.0	2.3			
Art Therapy	#	4	1	0	1	0	0	1	1	0	0
	%		25.0	.0	25.0	.0	.0	25.0	25.0	.0	.0
	%	3	33.3	.0	33.3	.0	.0	33.3			
Music Therapy	#	37	4	6	3	4	3	1	15	0	1
	%		10.8	16.2	8.1	10.8	8.1	2.7	40.5	.0	2.7
	%	21	19.0	28.6	14.3	19.0	14.3	4.8			
Occupational Therapy	#	25	11	14	0	0	0	0	0	0	0
	%		44.0	56.0	.0	.0	.0	.0	.0	.0	.0
	%	25	44.0	56.0	.0	.0	.0	.0			
Recreational Therapy	#	31	11	6	3	3	1	2	3	0	2
	%		35.5	19.4	9.7	9.7	3.2	6.5	9.7	.0	6.5
	%	26	42.3	23.1	11.5	11.5	3.8	7.7			
Respiratory Therapy	#	19	18	1	0	0	0	0	0	0	0
	%		94.7	5.3	.0	.0	.0	.0	.0	.0	.0
	%	19	94.7	5.3	.0	.0	.0	.0			
Speech - Language Pathology/Audiology	#	4	0	1	3	0	0	0	0	0	0
	%		.0	25.0	75.0	.0	.0	.0	.0	.0	.0
	%	4	.0	25.0	75.0	.0	.0	.0			

TABLE 2.11 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Allied Health, Other	#	7	3	1	2	0	0	0	1	0	0
	%		42.9	14.3	28.6	.0	.0	.0	14.3	.0	.0
	%	6	50.0	16.7	33.3	.0	.0	.0			
TOTAL	#	483	283	84	18	8	11	22	47	1	9
	%		58.6	17.4	3.7	1.7	2.3	4.6	9.7	.2	1.9
	%	426	66.4	19.7	4.2	1.9	2.6	5.2			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

10	43	Nursing-Related Services, Other	97.7
11	48	Physician Assisting - Primary Care	93.8
12	11	Radiograph Medical Technology	90.9
13	141	Medical Technology	90.1
14	18	Mental Health/Human Services, Other	87.8
-	426	All Allied Health Graduates	86.1
15	19	Dental Hygiene	84.3
16	6	Medical Laboratory Technology	83.4
17	17	Mental Health/Human Services Technologies	70.6
18	6	Allied Health, Other	66.7
19	26	Recreational Therapy	65.4
20	21	Music Therapy	47.6
21	3	Art Therapy	33.3
22	4	Speech-Language Pathology/Audiology	25.0

This listing suggests that baccalaureate graduates trained in Music Therapy, Art Therapy, and Speech and Language Pathology/Audiology were not in high demand in 1983.

When the proportion of full-time employed graduates who found full-time employment in Pennsylvania is compared across degree fields, the results, below, indicate that these graduates typically tend to seek and find employment in Pennsylvania.

RANK	N	DEGREE FIELD	PERCENT
3	2	Art Therapy	100.0
3	1	Dental Assisting	100.0
3	1	Genetic Counseling	100.0
3	2	Human Services Technologies	100.0
3	2	Nuclear Medical Technology	100.0
6	19	Respiratory Therapy	94.7
7	132	Medical Technology	93.2
8	12	Mental Health/Human Services Technologies	91.7
9.5	6	Allied Health, Other	83.3
9.5	42	Nursing-Related Services, Other	83.3
11	5	Medical Laboratory Technology	80.0
12	18	Dental Hygiene	77.8
-	393	All Allied Health Graduates	76.6
13	4	Speech-Language Pathology/Audiology	75.0
14	14	Mental Health/Human Services, Other	71.4
15	10	Radiograph Medical Technology	70.0
16	23	Recreational Therapy	60.9
17	7	Cytotechnology	57.1
18	45	Physician Assisting - Primary Care	55.5
19	4	Habilitative Services	50.0
20	25	Occupational Therapy	44.0
21	17	Music Therapy	41.2
22	2	Hematology Technology	0.0

Two Allied Health degree fields do not appear in these comparative listings, i.e., Diagnostic and Treatment Services, Other, and Chemistry Technology. All of the graduates with these degrees chose to go on for an advanced degree rather than to enter the Civilian Labor Market.

Results for Bachelor's Degree Graduates in the Health Sciences

Table 2.12 shows in more detail the major discipline of Health Sciences found in Table 2.0. When Table 2.12 is examined, it is clear that many of the Health Science oriented degree fields are characterized by their graduates going on for advanced degrees in substantial numbers, e.g., Audiology and Speech Pathology graduates, and all of the pre-professional degree graduates in areas such as: pre-medical, pre-dental, etc. Nursing and Medical Laboratory degree holders were the exception probably because their baccalaureate degrees are typically considered terminal degrees for employment purposes.

If we assume, however, that graduates in some of these degree fields did in fact enter the Civilian Labor Market and then attempt to compare the degree fields of Table 2.12 with regard to full-time, degree-related employment, we find the following:

RANK	N	DEGREE FIELD	PERCENT
1	2	Basic Clinical Health Sciences	100.0
2	27	Medical Laboratory	96.3
3	908	Nursing (R.N.)	95.7
-	1,235	All Health Science Graduates	89.7
4	182	Pharmacy	86.8
5	2	Pre-Medicine	50.0
6.5	17	Audiology and Speech Pathology	47.1
6.5	85	Health Sciences Administration	47.1
8	7	Public Health Laboratory Science	42.9
9	5	Health Sciences, Other	20.0

It should be noted that there were only two pre-medicine graduates in the Civilian Labor Market and, of these two, only one had found employment. This employment was, however, degree-related employment.

When the proportion of full-time employed health science graduates who found full-time employment in Pennsylvania is compared across degree fields, the following results are obtained.

RANK	N	DEGREE FIELD	PERCENT
2	2	Basic Clinical Health Sciences	100.0
2	1	Pre-Medicine	100.0
2	1	Health Sciences, Other	100.0
4	873	Nursing	87.9
5	10	Audiology and Speech Pathology	80.0
-	1,149	All Health Sciences Graduates	79.5

TABLE 2.12

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR BACCALAUREATE GRADUATES IN THE HEALTH SCIENCES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Audiology and Speech Pathology	#	31	6	2	2	0	5	2	14	0	0
	%		19.4	6.5	6.5	.0	16.1	6.5	45.2	.0	.0
	%	17	35.3	11.8	11.8	.0	29.4	11.8			
Basic Clinical Health Sciences	#	3	2	0	0	0	0	0	1	0	0
	%		66.7	.0	.0	.0	.0	.0	33.3	.0	.0
	%	2	100.0	.0	.0	.0	.0	.0			
Dentistry	#	3	0	0	0	0	0	0	3	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
Health Sciences Administration	#	105	19	21	7	7	8	23	17	3	0
	%		18.1	20.0	6.7	6.7	7.6	21.9	16.2	2.9	.0
	%	85	22.4	24.7	8.2	8.2	9.4	27.1			
Medical Laboratory	#	27	18	8	0	0	1	0	0	0	0
	%		66.7	29.6	.0	.0	3.7	.0	.0	.0	.0
	%	27	66.7	29.6	.0	.0	3.7	.0			
Nursing	#	983	764	105	3	1	22	13	60	7	8
	%		77.7	10.7	.3	.1	2.2	1.3	6.1	.7	.8
	%	908	84.1	11.6	.3	.1	2.4	1.4			
Pharmacy	#	224	81	77	7	12	4	1	42	0	0
	%		36.2	34.4	3.1	5.4	1.8	.4	18.8	.0	.0
	%	182	44.5	42.3	3.8	6.6	2.2	.5			

TABLE 2.12 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Podiatry	#	2	0	0	0	0	0	0	2	0	0
	%		.0	.0	.0	.0	.0	.0	100.4	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
Pre-Dentistry	#	5	0	0	0	0	0	0	5	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
Pre-Medicine	#	37	1	0	0	0	0	1	35	0	0
	%		2.7	.0	.0	.0	.0	2.7	94.6	.0	.0
	%	2	50.0	.0	.0	.0	.0	50.0			
Pre-Veterinary	#	2	0	0	0	0	0	0	2	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
Public Health Laboratory Science	#	8	1	2	2	0	1	1	1	0	0
	%		12.5	25.0	25.0	.0	12.5	12.5	12.5	.0	.0
	%	7	14.3	28.6	28.6	.0	14.3	14.3			
Toxicology (Clinical)	#	1	0	0	0	0	0	0	1	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			

TABLE 2.12 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Health Sciences, Other	#	7	1	0	0	0	2	2	2	0	0
	%		14.3	.0	.0	.0	28.6	28.6	28.6	.0	.0
	%	5	20.0	.0	.0	.0	40.0	40.0			
TOTAL	#	1,438	893	215	21	20	43	43	185	10	8
	%		62.1	15.0	1.5	1.4	3.0	3.0	12.9	.7	.6
	%	1,235	72.3	17.4	1.7	1.6	3.5	3.5			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

6	26	Medical Laboratory	69.2
7	5	Public Health Laboratory Science	60.0
8	177	Pharmacy	49.7
9	54	Health Sciences Administration	48.1

Most health science graduates seeking employment at the baccalaureate level seem to seek and find Pennsylvania based employment with the exception of graduates in Pharmacy and in Health Science Administration.

Results for Bachelor's Degree Graduates in the Physical Sciences

Table 2.13 gives a detailed breakout of the major discipline of Physical Sciences found in of Table 2.0. Inspection of Table 2.13 suggests that, with the exception of Chemistry and Physics, and, to some extent, Atmospheric Sciences and Meteorology, baccalaureate graduates in the physical sciences are typically finding it difficult to find degree-related work when they enter into the Civilian Labor Market. A substantial number, however, do go on for an advanced degree at a level where degree-related employment is much more readily obtained.

The Physical Science degree fields, when compared on the basis of the proportion of graduates in the Civilian Labor Market who found degree-related employment in 1983, ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
1	1	Physical Sciences, General	100.0
2	172	Chemistry	65.1
3	54	Physics	57.4
-	382	All Physical Science Graduates	50.2
4	14	Atmospheric Sciences and Meteorology	50.0
5	14	Physical Sciences, Other	42.8
6	35	Earth Science	34.3
7	90	Geological Sciences	25.6
8	2	Astronomy	0.0

It should be noted that only two of the six reported recipients of a degree in Astronomy had entered the job market and they were still unemployed. One other graduate in Astronomy had entered military service and three (50%) had gone on for an advanced degree. These findings are consistent with the fact that the doctoral degree is the accepted terminal degree for graduates in Astronomy.

When full-time employed Physical Science graduates are compared on the basis of the percentage of full-time employment in Pennsylvania, the following ranking results (Astronomy graduates excluded):

RANK	N	DEGREE FIELD	PERCENT
1	133	Chemistry	66.2
2	18	Earth Science	57.9

TABLE 2.13

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR BACCALAUREATE GRADUATES IN THE PHYSICAL SCIENCES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Physical Sciences, General	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
Astronomy	#	6	0	0	0	0	0	2	3	1	0
	%		.0	.0	.0	.0	.0	33.3	50.0	16.7	.0
	%	2	.0	.0	.0	.0	.0	100.0			
Atmospheric Sciences and Meteorology	#	36	2	5	2	0	1	4	9	13	0
	%		5.6	13.9	5.6	.0	2.8	11.1	25.0	36.1	.0
	%	14	14.3	35.7	14.3	.0	7.1	28.6			
Chemistry	#	384	70	42	18	3	7	32	206	3	3
	%		18.2	10.9	4.7	.8	1.8	8.3	53.6	.8	.8
	%	172	40.7	24.4	10.5	1.7	4.1	18.6			
Geological Sciences	#	161	6	17	18	13	5	31	62	1	8
	%		3.7	10.6	11.2	8.1	3.1	19.3	38.5	.6	5.0
	%	90	6.7	18.9	20.0	14.4	5.6	34.4			
Earth Science	#	48	7	5	4	3	5	11	10	3	0
	%		14.6	10.4	8.3	6.3	10.4	22.9	20.8	6.3	.0
	%	35	20.0	14.3	11.4	8.6	14.3	31.4			
Physics	#	119	13	18	5	5	1	12	52	13	0
	%		10.9	15.1	4.2	4.2	.8	10.1	43.7	10.9	.0
	%	54	24.1	33.3	9.3	9.3	1.9	22.2			

TABLE 2.13 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Physical Sciences, Other	#	17	3	3	0	2	0	6	3	0	0
	%		17.6	17.6	.0	11.8	.0	35.3	17.6	.0	.0
	%	14	21.4	21.4	.0	14.3	.0	42.9			
TOTAL	#	772	101	91	47	26	19	98	345	34	11
	%		13.1	11.8	6.1	3.4	2.5	12.7	44.7	4.4	1.4
	%	382	26.4	23.8	12.3	6.8	5.0	25.7			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

-	265	All Physical Science Graduates	55.8
3.5	9	Atmospheric Sciences and Meteorology	44.4
3.5	54	Geological Sciences	44.4
5	41	Physics	43.9
6	8	Physical Sciences, Other	37.5
7	1	Physical Sciences, General	0.0

Results for Bachelor's Degree Graduates in the Social Sciences

Table 2.14 summarizes the 1983 detailed postgraduate activity findings for the Social Sciences category of Table 2.0. These graduates had even more difficulty in obtaining degree-related employment than did the Physical Science graduates, i.e., 41.4 percent compared to 50.2 percent for the Physical Science graduates.

As might be expected, some of the Social Sciences in Table 2.14 have a substantial proportion of their graduates going on for an advanced degree even though only twenty-three percent do so for the Social Sciences as a whole. Graduates in History (31.8%), International Relations (35.0%) and Political Science and Government (36.0%) were the most likely to pursue an advanced degree in 1983.

Many of the graduates in the Social Sciences chose, however, to seek employment in the Civilian Labor Market. When the Social Science degree fields of Table 2.14 were ranked according to the proportion of graduates in the Civilian Labor Market who had found degree-related, full-time employment, the following ranking resulted:

RANK	N	DEGREE FIELD	PERCENT
1	87	Criminology	60.9
2	24	International Relations	58.4
3	7	Urban Studies	57.1
4	428	Economics	56.8
5.5	22	Social Science Studies Unique to Pennsylvania (Sociology/Anthropology)	50.0
5.5	54	Social Sciences, Other	50.0
-	1,388	All Social Science Graduates	41.4
7	207	Sociology	38.1
8	38	Social Sciences, General	36.8
9	45	Geography	31.1
10	276	Political Science and Government	26.9
11	182	History	21.9
12	17	Anthropology	10.0
13	1	Archeology	0.0

It is obvious from the above listing that Social Science graduates have considerable difficulty finding degree-related employment at the baccalaureate level.

TABLE 2.14

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR BACCALAUREATE GRADUATES IN THE SOCIAL SCIENCES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Social Sciences, General	#	50	10	4	8	6	6	4	11	1	0
	%		20.0	8.0	16.0	12.0	12.0	8.0	22.0	2.0	.0
	%	38	26.3	10.5	21.1	15.8	15.8	10.5			
Anthropology	#	23	1	1	5	1	1	8	3	1	2
	%		4.3	4.3	21.7	4.3	4.3	34.8	13.0	4.3	8.7
	%	17	5.0	5.0	29.4	5.9	5.9	47.1			
Archeology	#	2	0	0	1	0	0	0	1	0	0
	%		.0	.0	50.0	.0	.0	.0	50.0	.0	.0
	%	1	.0	.0	100.0	.0	.0	.0			
Criminology	#	105	45	8	0	0	12	22	4	7	7
	%		42.9	7.6	.0	.0	11.4	21.0	3.8	6.7	6.7
	%	87	51.7	9.2	.0	.0	13.8	25.3			
Economics	#	530	98	145	51	32	10	92	80	9	13
	%		18.5	27.4	9.6	6.0	1.9	17.4	15.1	1.7	2.5
	%	428	22.9	33.9	11.9	7.5	2.3	21.5			
Geography	#	63	6	8	9	4	6	12	15	2	1
	%		9.5	12.7	14.3	6.3	9.5	19.0	23.8	3.2	1.6
	%	45	13.3	17.8	20.0	8.9	13.3	26.7			
History	#	292	23	17	52	37	18	35	93	11	6
	%		7.9	5.8	17.8	12.7	6.2	12.0	31.8	3.8	2.1
	%	182	12.6	9.3	28.6	20.3	9.9	19.2			

TABLE 2.14 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
International Relations	#	40	1	13	2	1	1	6	14	0	2
	%		2.5	32.5	5.0	2.5	2.5	15.0	35.0	.0	5.0
	%	24	4.2	54.2	8.3	4.2	4.2	25.0			
Political Science and Government	#	480	49	25	66	60	19	57	173	18	13
	%		10.2	5.2	13.7	12.5	4.0	11.9	36.0	3.7	2.7
	%	276	17.8	9.1	23.9	21.7	6.9	20.7			
Sociology	#	280	58	21	49	21	14	44	55	5	13
	%		20.7	7.5	17.5	7.5	5.0	15.7	19.6	1.8	4.6
	%	207	28.0	10.1	23.7	10.1	6.8	21.3			
Urban Studies	#	7	4	0	0	0	0	3	0	0	0
	%		57.1	.0	.0	.0	.0	42.9	.0	.0	.0
	%	7	57.1	.0	.0	.0	.0	42.9			
Social Science Studies Unique to Pennsylvania (Sociology/Anthropology)	#	24	5	6	1	4	3	3	2	0	0
	%		20.8	25.0	4.2	16.7	12.5	12.5	8.3	.0	.0
	%	22	22.7	27.3	4.5	18.2	13.6	13.6			
Social Sciences, Other	#	67	22	5	9	2	7	9	11	0	2
	%		32.8	7.5	13.4	3.0	10.4	13.4	16.4	.0	3.0
	%	54	40.7	9.3	16.7	3.7	13.0	16.7			
TOTAL	#	1,963	322	253	253	168	97	295	462	54	59
	%		16.4	12.9	12.9	8.6	4.9	15.0	23.5	2.8	3.0
	%	1,388	23.2	18.2	18.2	12.1	7.0	21.3			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

In contrast to most of the other major disciplines found in Table 2.0, the Social Sciences graduates of 1983 tended to have a substantial rate of unemployment (21.3%) when they entered the Civilian Labor Force. When the rates of Civilian Labor Force unemployment for the Social Sciences were ranked, the individual degree fields were ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
1	17	Anthropology	47.1
2	7	Urban Studies	42.9
3	45	Geography	26.7
4	87	Criminology	25.3
5	24	International Relations	25.0
-	1,388	All Social Science Graduates	21.3
6	428	Economics	21.5
7	207	Sociology	21.3
8	276	Political Science and Government	20.7
9	182	History	19.2
10	54	Social Sciences, Other	16.7
11	22	Social Sciences Unique to Pennsylvania (Sociology/Anthropology)	13.6
12	38	Social Sciences, General	10.5
13	1	Archeology	0.0

Apparently graduates in the Social Sciences tend to persist in finding degree-related employment even though a substantial period of unemployment is required.

When the Social Science degree fields of Table 2.14 were ranked according to the percentage of full-time employed graduates who had found full-time employment in Pennsylvania, the results were as follows:

RANK	N	DEGREE FIELD	PERCENT
1.5	1	Archeology	100.0
1.5	4	Urban Studies	100.0
3	53	Criminology	84.9
4	38	Social Sciences, Other	81.6
5	8	Anthropology	75.0
6	149	Sociology	71.8
7	28	Social Sciences, General	64.3
8	129	History	58.1
-	996	All Social Science Graduates	57.7
9	200	Political Science and Government	57.5
10	27	Geography	55.5
11	326	Economics	45.7
12	16	Social Science Studies Unique to Pennsylvania (Sociology/Anthropology)	37.5
13	17	International Relations	17.6

Results for Bachelor's Degree Graduates in the Precision Production Trades

Table 2.15 gives a detailed summary of the degree fields covered by the major discipline category of Precision Production found in Table 2.0.

Examination of Table 2.15 reveals that, at the baccalaureate level, this category primarily consists of graduates in Commercial Art and of graduates in Graphics and Printing Communications.

Eighty percent of the graduates in the General Graphics and Communications category who entered the Civilian Labor Market found degree-related full-time employment, 57.1 percent of the Commercial Art graduates did so, and a full one hundred percent of the seven graduates in the general category of Precision Production, Other, found such employment.

With regard to employment in Pennsylvania, although 100.0 percent of the full-time employed Commercial Arts graduates found employment in Pennsylvania, only 75.0 percent of the Graphic and Printing Communications, General graduates did so, and none of the Precision Production graduates found such employment.

Results for Bachelor's Degree Graduates in the Visual and Performing Arts

Table 2.16 gives detailed degree field information for the Visual and Performing Arts category of Table 2.0.

When the figures of Table 2.16 are viewed, the strongest impression is one of a general distribution of graduates across all of the Civilian Labor Market categories and relatively few graduates in the last three columns of Table 2.16. Graduates in the Visual and Performing Arts are therefore very much in the labor market but experience varying degrees of success in finding degree-related and/or full-time employment. In addition, it is interesting to note that work on an advanced degree is, in general, not typical of these graduates with the exception of graduates in Music (36.1%) and, to a lesser degree, graduates in the Dramatic Arts (22.4%). Music represents a discipline with considerable intellectual content as well as a high range of levels of mastery which may account for this. The Dramatic Arts, to a lesser degree also have a considerable amount of intellectual content.

When the Visual and Performing Arts degree fields of Table 7.16 were ranked according to the proportion of graduates in the Civilian Labor Market who found degree-related full-time employment they ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
1	83	Design	75.9
2	64	Dramatic Arts	64.1
3	36	Visual and Performing Arts, Other	63.9
-	597	All Visual and Performing Arts, Graduates	51.1
4	27	Visual and Performing Arts, General	48.1
5	271	Fine Arts	44.7

TABLE 2.15

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR BACCALAREATE GRADUATES IN GRAPHIC AND PRINTING COMMUNICATIONS AND IN PRECISION PRODUCTION, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Graphic and Printing Communications, General	#	12	6	2	0	0	0	2	2	0	0
	%		50.0	16.7	.0	.0	.0	16.7	16.7	.0	.0
	%	10	60.0	20.0	.0	.0	.0	20.0			
Commercial Art	#	7	4	0	2	0	1	0	0	0	0
	%		57.1	.0	28.6	.0	14.3	.0	.0	.0	.0
	%	7	57.1	.0	28.7	.0	14.3	.0			
Precision Production, Other	#	7	0	7	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	7	.0	100.0	.0	.0	.0	.0			
TOTAL	#	26	10	9	2	0	1	2	2	0	0
	%		38.5	34.6	7.7	.0	3.8	7.7	7.7	.0	.0
	%	24	41.7	37.5	8.3	.0	4.2	8.3			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

TABLE 2.16

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR BACCALAUREATE DEGREE GRADUATES IN THE VISUAL AND PERFORMING ARTS, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Visual and Performing Arts, General	#	31	11	2	4	5	1	4	2	0	2
	%		35.5	6.5	12.9	16.1	3.2	12.9	6.5	.0	6.5
	%	27	40.7	7.4	14.8	18.5	3.7	14.8			
Crafts	#	9	2	0	2	1	2	2	0	0	0
	%		22.2	.0	22.2	11.1	22.2	22.2	.0	.0	.0
	%	9	22.2	.0	22.2	11.1	22.2	22.2			
Dance	#	1	0	0	0	0	1	0	0	0	0
	%		.0	.0	.0	.0	100.0	.0	.0	.0	.0
	%	1	.0	.0	.0	.0	100.0	.0			
Design	#	89	31	32	2	4	4	10	3	2	1
	%		34.8	36.0	2.2	4.5	4.5	11.2	3.4	2.2	1.1
	%	83	37.3	38.6	2.4	4.8	4.8	12.0			
Dramatic Arts	#	85	13	28	4	4	5	10	19	0	2
	%		15.3	32.9	4.7	4.7	5.9	11.8	22.4	.0	2.4
	%	64	20.3	43.8	6.3	6.3	7.8	15.6			
Film Arts	#	11	3	0	0	1	0	6	1	0	0
	%		27.3	.0	.0	9.1	.0	54.5	9.1	.0	.0
	%	10	30.0	.0	.0	10.0	.0	60.0			
Fine Arts	#	330	85	36	42	16	37	55	44	1	14
	%		25.8	10.9	12.7	4.8	11.2	16.7	13.3	.3	4.2
	%	271	31.4	13.3	15.5	5.9	13.7	20.3			

TABLE 2.16 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Music	#	155	27	12	17	10	20	10	56	0	3
	%		17.4	7.7	11.0	6.5	12.9	6.5	36.1	.0	1.9
	%	96	28.1	12.5	17.7	10.4	20.8	10.4			
Visual and Performing Arts, Other	#	43	17	6	1	1	3	8	6	0	1
	%		39.5	14.0	2.3	2.3	7.0	18.6	14.0	.0	2.3
	%	36	47.2	16.7	2.8	2.8	8.3	22.2			
TOTAL	#	754	189	116	72	42	73	105	131	3	23
	%		25.1	15.4	9.5	5.6	9.7	13.9	17.4	.4	3.1
	%	597	31.7	19.4	12.1	7.0	12.2	17.6			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

6	96	Music	40.6
7	10	Film Arts	30.0
8	9	Crafts	22.2

In terms of the proportion of full-time employed Visual and Performing Arts graduates who found full-time employment in Pennsylvania, the degree fields of Table 2.16 ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
1	5	Crafts	80.0
2	4	Fine Arts	75.0
3	25	Visual and Performing Arts, Other	72.0
4	179	Fine Arts	70.9
5	22	Visual and Performing Arts, General	68.2
6	66	Music	66.7
-	419	All Visual and Performing Arts Graduates	62.3
7	69	Design	47.8
8	49	Dramatic Arts	34.7

The degree field of Dance was omitted from the above listing since there was only one reported graduate in this degree field and that graduate was reported as having part-time employment.

The findings for graduates in the degree field of Visual and Performing Arts seem to reflect the basic nature of employment in this general area, i.e., it is frequently located outside of Pennsylvania and the job market is generally very competitive.

SOME COMMENTS ON THE FINDINGS FOR BACCALAUREATE DEGREE GRADUATES

Although the rate of full-time, degree-related employment tends to be somewhat lower for these graduates than for the recipients of other degrees, it should be remembered that the baccalaureate degree is often not the terminal degree for its recipient. This is in distinct contrast to the picture for the associate degree and for the higher degrees where there is a substantially higher incidence of preparation for entry into a specific profession or occupation. In addition, many of the degree fields in higher education at this level are, by definition, more generalized and less occupation oriented. Liberal Arts oriented graduates, however, may be successful, over the long run, in finding satisfying employment because their preparation has enabled them to readily master the requirements of a job and to rise to higher levels of responsibility.

In sum, the findings of this report concerning the baccalaureate graduates of 1983 suggest that a bachelor's degree is still a viable option.

IX. RESULTS FOR MASTER'S DEGREE GRADUATES

Table 3.0, on the pages that follow, summarizes the postgraduate activity of the master's graduates of 1982-83 in terms of the broadest (2-digit level) Classification of Instructional Programs (CIP) categories available. As before, a more detailed analysis of selected major disciplines from Table 3.0 will be made using a combination of the four-digit and six-digit levels of the CIP classification system.

The findings of Table 3.0 are given in terms of two separate percentage distributions that accompany the numerical counts for a given major discipline area. Numerical counts are shown for each of the postgraduate activity categories used in this study. The first of the two percentage distributions is simply the percentage of reported graduates in each type of activity. The second percentage distribution indicates the percentage of graduates in the Civilian Labor Market engaged in employment-related activity, i.e., it excludes those in military service, those pursuing an advanced degree, and those engaged in activity unrelated to employment.

For each of the major disciplines, the findings are given in terms of: (1) the number of graduates who found degree-related employment in Pennsylvania, (2) the number of graduates who found degree-related employment outside of Pennsylvania, (3) the number of graduates who found employment in Pennsylvania that was unrelated to their degree field, (4) the number of graduates who found employment outside of Pennsylvania that was unrelated to their degree field, (5) the number of graduates who found part-time employment, (6) the number of graduates who were unemployed and still seeking employment, (7) the number of graduates who had entered military service, (8) the number of graduates who were pursuing an advanced degree and, finally, (9) the number of graduates who were engaged in other activities, i.e., those not employed and not in graduate school but who were also not seeking employment.

Below is a comparison of selected measures on the master's degree graduates of 1977-78 through 1982-83. The measures were derived from this report and from previous reports in this series.

Year	Reported Graduates	Full-Time Employed	Part-Time Employed	Un-employed	Seeking Advanced Degree	Full-Time Employed In Field Prepared	Full-Time Employed In Pa.
		%	%	%	%	%	%
1978	3,847	82.1	2.3	5.5	10.1	90.8	77.3
1979	3,567	83.7	2.7	4.7	8.9	92.3	70.2
1980	3,780	84.1	2.7	4.5	8.7	90.1	74.0
1981	3,503	81.2	3.0	6.1	9.6	89.3	69.9
1982	3,414	78.4	4.0	5.9	10.8	89.3	70.7
1983	2,285	74.5	2.5	6.0	14.6	86.9	66.6

There are several trends in the above listing. For example, the percentage of 1983 master's degree graduates finding full-time employment is the lowest to

TABLE 3.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR MASTERS DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
01 AGRIBUSINESS AND AGRICULTURAL PRODUCTION	#	5	1	1	0	0	0	1	2	0	0
	%		20.0	20.0	.0	.0	.0	20.0	40.0	.0	.0
	%	3	33.3	33.3	.0	.0	.0	33.3			
02 AGRICULTURAL SCIENCES	#	12	4	2	1	0	2	0	3	0	0
	%		33.3	16.7	8.3	.0	16.7	.0	25.0	.0	.0
	%	9	44.4	22.2	11.1	.0	22.2	.0			
03 RENEWABLE NATURAL RESOURCES	#	8	1	1	1	0	0	0	5	0	0
	%		12.5	12.5	12.5	.0	.0	.0	62.5	.0	.0
	%	3	33.3	33.3	33.3	.0	.0	.0			
04 ARCHITECTURE AND ENVIRONMENTAL DESIGN	#	15	4	6	0	0	0	3	2	0	0
	%		26.7	40.0	.0	.0	.0	20.0	13.3	.0	.0
	%	13	30.8	46.2	.0	.0	.0	23.1			
05 AREA AND ETHNIC STUDIES	#	4	2	0	0	0	0	0	1	0	1
	%		50.0	.0	.0	.0	.0	.0	25.0	.0	25.0
	%	2	100.0	.0	.0	.0	.0	.0			
06 BUSINESS AND MANAGEMENT	#	408	190	135	6	10	4	28	29	3	3
	%		46.6	33.1	1.5	2.5	1.0	6.9	7.1	.7	.7
	%	373	50.9	36.2	1.6	2.7	1.1	7.5			
09 COMMUNICATIONS	#	16	5	4	3	2	0	2	0	0	0
	%		31.3	25.0	18.8	12.5	.0	12.5	.0	.0	.0
	%	16	31.3	25.0	18.8	12.5	.0	12.5			

TABLE 3.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR MASTER'S DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED OTHER IN PA	EMPLOYED IN FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
11 COMPUTOR AND INFORMATION SCIENCES	#	19	3	2	0	0	0	0	14	0	0
	%		15.8	10.5	.0	.0	.0	.0	73.7	.0	.0
	%	5	60.0	40.0	.0	.0	.0	.0			
13 EDUCATION	#	704	376	118	69	9	31	42	42	5	12
	%		53.4	16.8	9.8	1.3	4.4	6.0	6.0	.7	1.7
	%	645	58.3	18.3	10.7	1.4	4.8	6.5			
14 ENGINEERING	#	191	47	60	2	3	0	13	58	7	1
	%		24.6	31.4	1.0	1.6	.0	6.8	30.4	3.7	.5
	%	125	37.6	48.0	1.6	2.4	.0	10.4			
15 ENGINEERING AND ENGINEERING-RELATED TECHNOLOGIES	#	10	2	2	0	0	0	2	4	0	0
	%		20.0	20.0	.0	.0	.0	20.0	40.0	.0	.0
	%	6	33.3	33.3	.0	.0	.0	33.3			
16 FOREIGN LANGUAGES	#	15	2	4	5	1	0	0	3	0	0
	%		13.3	26.7	33.3	6.7	.0	.0	20.0	.0	.0
	%	12	16.7	33.3	41.7	8.3	.0	.0			
17 ALLIED HEALTH	#	75	51	17	1	0	2	2	1	0	1
	%		68.0	22.7	1.3	.0	2.7	2.7	1.3	.0	1.3
	%	73	69.9	23.3	1.4	.0	2.7	2.7			
18 HEALTH SCIENCES	#	93	54	16	1	0	3	3	14	0	2
	%		58.1	17.2	1.1	.0	3.2	3.2	15.1	.0	2.2
	%	77	70.1	20.8	1.3	.0	3.9	3.9			

TABLE 3.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR MASTER'S DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
19 HOME ECONOMICS	#	7	1	2	0	0	0	1	2	0	1
	%		14.3	28.6	.0	.0	.0	14.3	28.6	.0	14.3
	%	4	25.0	50.0	.0	.0	.0	25.0			
23 LETTERS	#	61	24	8	6	1	5	5	11	0	1
	%		39.3	13.1	9.8	1.6	8.2	8.2	18.0	.0	1.6
	%	49	49.0	16.3	12.2	2.0	10.2	10.2			
24 LIBERAL/GENERAL STUDIES	#	4	0	1	0	0	0	0	3	0	0
	%		.0	25.0	.0	.0	.0	.0	75.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
25 LIBRARY AND ARCHIVAL SCIENCES	#	20	7	4	1	0	2	4	2	0	0
	%		35.0	20.0	5.0	.0	10.0	20.0	10.0	.0	.0
	%	18	38.9	22.2	5.6	.0	11.1	22.2			
26 LIFE SCIENCES	#	80	23	13	2	6	0	4	31	0	1
	%		28.7	16.2	2.5	7.5	.0	5.0	38.7	.0	1.2
	%	48	47.9	27.1	4.2	12.5	.0	8.3			
27 MATHEMATICS	#	42	14	10	2	1	0	3	11	1	0
	%		33.3	23.8	4.8	2.4	.0	7.1	26.2	2.4	.0
	%	30	46.7	33.3	6.7	3.3	.0	10.0			
30 MULTI/INTERDISCIPLINARY STUDIES	#	21	8	6	2	0	1	2	1	0	1
	%		38.1	28.6	9.5	.0	4.8	9.5	4.8	.0	4.8
	%	19	42.1	31.6	10.5	.0	5.3	10.5			

TABLE 3.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR MASTERS DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
31 PARKS AND RECREATION	#	7	1	1	1	0	1	2	0	0	1
	%		14.3	14.3	14.3	.0	14.3	28.6	.0	.0	14.3
	%	6	16.7	16.7	16.7	.0	16.7	33.3			
38 PHILOSOPHY AND RELIGION	#	18	1	3	2	4	0	0	8	0	0
	%		5.6	16.7	11.1	22.2	.0	.0	44.4	.0	.0
	%	10	10.0	30.0	20.0	40.0	.0	.0			
39 THEOLOGY	#	7	0	2	1	0	0	0	4	0	0
	%		.0	28.6	14.3	.0	.0	.0	57.1	.0	.0
	%	3	.0	66.7	33.3	.0	.0	.0			
40 PHYSICAL SCIENCES	#	67	13	18	3	2	0	4	25	1	1
	%		19.4	26.9	4.5	3.0	.0	6.0	37.3	1.5	1.5
	%	40	32.5	45.0	7.5	5.0	.0	10.0			
42 PSYCHOLOGY	#	107	56	4	6	5	2	6	26	0	2
	%		52.3	3.7	5.6	4.7	1.9	5.6	24.3	.0	1.9
	%	79	70.9	5.1	7.6	6.3	2.5	7.6			
43 PROTECTIVE SERVICES	#	2	2	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	2	100.0	.0	.0	.0	.0	.0			
44 PUBLIC AFFAIRS	#	105	44	23	13	13	2	7	3	0	0
	%		41.9	21.9	12.4	12.4	1.9	6.7	2.9	.0	.0
	%	102	43.1	22.5	12.7	12.7	2.0	6.9			

TABLE 3.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR MASTERS DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
45 SOCIAL SCIENCES	#	93	28	12	11	11	1	1	25	1	3
	%		30.1	12.9	11.8	11.8	1.1	1.1	26.9	1.1	3.2
	%	64	43.8	18.8	17.2	17.2	1.6	1.6			
50 VISUAL AND PERFORMING ARTS	#	69	24	19	8	8	2	3	4	0	1
	%		34.8	27.5	11.6	11.6	2.9	4.3	5.8	.0	1.4
	%	64	37.5	29.7	12.5	12.5	3.1	4.7			
TOTAL		2,285	988	494	147	76	58	138	334	18	32
			43.2	21.6	6.4	3.3	2.5	6.0	14.6	.8	1.4
		1,901	52.0	26.0	7.7	4.0	3.1	7.3			

• PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

date, while the number going on for an advanced degree is the highest. This suggests that master's degree graduates are increasingly inclined to see their degrees as only a step toward a higher degree rather than as a terminal degree. Going on for an advanced degree is probably an intelligent choice on their part, one that reflects the realities of the job market for master's degree graduates in 1983. The fact that the proportion of full-time employed graduates who found degree-related employment was also the lowest figure reported during these years lends further credence to this observation. The proportion of 1983 graduates (full-time employed) obtaining Pennsylvania employment was likewise the lowest of this period. This finding also suggests that job market realities may be operating here.

Master's Degree Graduates Employed Full-Time in Their Field of Preparation

Table 3.01 ranks the major disciplines of Table 3.0 according to the proportion of master's degree graduates who found full-time employment related to their field of preparation. In general, the disciplines at the top of Table 3.01 are those that do not have a large proportion of their graduates going on for an advanced degree. These disciplines tend to be those for which the degree is frequently viewed as the terminal degree. Those at the bottom of Table 3.01 are more likely to be those with a large proportion of their graduates going on for an advanced degree, and the master's degree is seen as a stepping stone to a higher degree.

The data of Table 3.01, however, do not clearly indicate what happens to a graduate who decides not to go on for an advanced degree but rather to enter the Civilian Labor Market in search of employment. This requires a somewhat different analysis using the concept of the Civilian Labor Market.

Full-Time Degree-Related Employment of Master's Degree Graduates in the Civilian Labor Market

Table 3.02 reflects the relative rankings of the major disciplines when only those employed in the Civilian Labor Market are considered. The resulting changes can be dramatic, e.g., the shift of Computer and Information Systems from a rank of 27 to a rank of 2.5.

Table 3.02 indicates that the disciplines of Table 3.0 are generally characterized by most of their graduates finding degree-related employment. The proportion finding such employment varies widely, however, ranging from 100 percent for graduates in the major discipline of Protective Services down to only 33.4 percent for graduates in the major discipline area of Parks and Recreation. Nevertheless, only four of these disciplines had a degree-related employment rate that was at or below fifty percent, i.e., Foreign Languages, Philosophy and Religion, and Parks and Recreation. Half of the disciplines of Table 3.02 had at least seventy-five percent of their graduates finding degree-related employment when they entered the Civilian Labor Market.

TABLE 3.01

A RANK ORDERING OF MASTER'S DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1982-83 GRADUATES FINDING FULL-TIME EMPLOYMENT RELATED TO THEIR FIELD OF PREPARATION

RANK	MAJOR DISCIPLINE	PERCENT
1	Protective Services	100.0*
2	Allied Health	90.7
3	Business and Management	79.7
4	Health Sciences	75.3
5	Education	70.2
6.5	Multi/Interdisciplinary Studies	66.7
6.5	Architecture and Environmental Design	66.7
8	Public Affairs	63.8
9	Visual and Performing Arts	62.3
10	Mathematics	57.1
11	Communications	56.3
12.5	Psychology	56.0
12.5	Engineering	56.0
14	Library and Archival Sciences	55.0
15	Letters	52.4
16	Area and Ethnic Studies	50.0*
17	Agricultural Sciences	50.0
18	Physical Sciences	46.3
19	Life Sciences	44.9
20	Social Sciences	43.0
21	Home Economics	42.9*
23	Foreign Languages	40.0
23	Engineering and Engineering-Related Technologies	40.0*
23	Agribusiness and Agricultural Production	40.0*
25.5	Theology	28.6*
25.5	Parks and Recreation	28.6*
27	Computer and Information Sciences	26.3
28.5	Liberal, General Studies	25.0*
28.5	Renewable Natural Resources	25.0*
30	Philosophy and Religion	22.3

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES.

TABLE 3.02

A RANK ORDERING OF MASTER'S DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1982-83 GRADUATES IN THE CIVILIAN LABOR MARKET WHO FOUND FULL-TIME EMPLOYMENT RELATED TO THEIR FIELD OF PREPARATION

RANK	MAJOR DISCIPLINE	PERCENT
2.5	Protective Services	100.0*
2.5	Liberal, General Studies	100.0*
2.5	Computer and Information Sciences	100.0*
2.5	Area and Ethnic Studies	100.0*
5	Allied Health	93.2
6	Health Sciences	90.9
7	Business and Management	87.1
8	Engineering	85.6
9	Mathematics	80.0
10	Physical Sciences	77.5
11	Architecture and Environmental Design	77.0
12	Education	76.6
13	Psychology	76.0
14.5	Life Sciences	75.0
14.5	Home Economics	75.0*
16	Multi/Interdisciplinary Studies	73.7
17	Visual and Performing Arts	67.2
18	Theology	66.7*
20.5	Engineering and Engineering-Related Technologies	66.6*
20.5	Renewable Natural Resources	66.6*
20.5	Agricultural Sciences	66.6*
20.5	Agribusiness and Agricultural Production	66.6*
23	Public Affairs	65.6
24	Letters	65.3
25	Social Sciences	62.6
26	Library and Archival Sciences	61.1
27	Communications	56.3
28	Foreign Languages	50.0
29	Philosophy and Religion	40.0*
30	Parks and Recreation	33.4*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES IN THE CIVILIAN LABOR MARKET.

Master's Degree Graduates Employed Full-Time in Pennsylvania

Table 3.03 ranks the major disciplines of Table 3.0 according to the percentage of graduates with full-time employment who had found full-time employment in Pennsylvania. Most of these disciplines had a majority of their graduates finding full-time employment in Pennsylvania. Only eight of the thirty discipline areas found in Table 3.03 had rates of Pennsylvania full-time employment that were at or below fifty percent, i.e., Agriculture and Agriculture Production, Engineering and Engineering-Related Technology, Theology, Physical Science, Architecture and Environmental Design, Home Economics, Philosophy and Religion, and Liberal Arts/General Studies graduates. Eight of the disciplines in Table 3.03 had seventy-five percent or more of their graduates finding full-time employment in Pennsylvania.

Unemployed Master's Degree Graduates in the Civilian Labor Market

While there was an overall pattern of Master's degree graduates of 1983 being successful in finding full-time, degree-related employment, there were, nevertheless, some major discipline areas in Table 3.0 for which a substantial degree of unemployment was reported. Table 3.04, therefore, ranks the major disciplines of Table 3.0 according to the percentage of unemployment experienced by those 1983 graduates who had entered the Civilian Labor Market.

The findings of Table 3.04 indicate that the highest levels of unemployment were experienced by graduates in Parks and Recreation, in Engineering and Engineering-Related Technologies, in Agribusiness and Agricultural Production, in Home Economics, and in Architecture and Environmental Design. These high rates of unemployment may be due in part to persistence in seeking full-time degree-related employment but the basic causes are, most probably, economic recession, cutbacks in government funding, and the difficulties being experienced by the agriculture industry. The improvement in the general economy that has recently occurred may result in an improvement in the as yet unreported rate of unemployment for 1984 graduates. Those findings will appear in the next report of this series.

Master's Degree Graduates Pursuing an Advanced Degree

Typically, the master's degree is seen as a step toward the doctorate by graduates in many of these disciplines. As a result, the proportion going on for an advanced degree can be very high although the proportion can vary widely and some disciplines have very few going on for an advanced degree.

Table 3.05 ranks the disciplines of Table 3.0 according to the percentage of 1982-83 graduates going on for an advanced degree. It is interesting to note that 75 percent of the graduates with a master's degree in Liberal/General Studies went on for an advanced degree. This is consistent with the nature of the academic job market at present where only the possession of a doctorate is likely to provide degree-related employment for these graduates. Even then there are relatively few formal academic openings for the number graduated.

TABLE 3.03

A RANK ORDERING OF MASTER'S DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF FULL-TIME EMPLOYED 1982-83 GRADUATES WHO FOUND EMPLOYMENT IN PENNSYLVANIA

RANK	MAJOR DISCIPLINE	PERCENT
1.5	Area and Ethnic Studies	100.0*
1.5	Protective Services	100.0*
3	Psychology	87.3
4	Education	77.8
5	Health Sciences	77.5
6	Letters	76.9
7.5	Engineering	75.4
7.5	Allied Health	75.4
9	Agricultural Sciences	71.4*
11	Renewable Natural Resources	66.7*
11	Library and Archival Sciences	66.7
11	Parks and Recreation	66.7*
13	Social Sciences	62.9
14	Multi/Interdisciplinary Studies	62.5
15	Public Affairs	61.3
16	Computer and Information Sciences	60.0*
17	Mathematics	59.3
18	Foreign Languages	58.3
19	Business and Management	57.5
20	Communications	57.1
21	Life Sciences	56.8
22	Visual and Performing Arts	54.2
24	Agribusiness and Agricultural Production	50.0*
24	Engineering and Engineering-Related Technologies	50.0*
24	Theology	50.0*
26	Physical Sciences	44.4
27	Architecture and Environmental Design	40.0*
28	Home Economics	33.3*
29	Philosophy and Religion	30.0*
30	Liberal/General Studies	0.0*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED FULL-TIME EMPLOYED GRADUATES.

TABLE 3.04

A RANK ORDERING OF MASTER'S DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF UNEMPLOYED 1982-83 GRADUATES IN THE CIVILIAN LABOR MARKET

RANK	MAJOR DISCIPLINE	PERCENT
2	Parks and Recreation	33.3*
2	Engineering and Engineering-Related Technologies	33.3*
2	Agribusiness and Agricultural Production	33.3*
3	Home Economics	25.0*
4	Architecture and Environmental Design	23.1
5	Library and Archival Sciences	22.2
6	Communications	12.5
7	Multi/Interdisciplinary Studies	10.5
8	Engineering	10.4
9	Letters	10.2
10.5	Physical Sciences	10.0
10.5	Mathematics	10.0
12	Life Sciences	8.3
13	Psychology	7.6
14	Business and Management	7.5
15	Public Affairs	6.9
16	Education	6.5
17	Visual and Performing Arts	4.7
18	Health Sciences	3.9
19	Allied Health	2.7
20	Social Sciences	1.6
24.5	Protective Services	.0*
24.5	Theology	.0*
24.5	Philosophy and Religion	.0*
24.5	Liberal, General Studies	.0*
24.5	Foreign Languages	.0
24.5	Computer and Information Sciences	.0*
24.5	Area and Ethnic Studies	.0*
24.5	Renewable Natural Resources	.0*
24.5	Agricultural Sciences	.0*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES IN THE CIVILIAN LABOR MARKET.

TABLE 3.05

A RANK ORDERING OF MASTER'S DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1982-83 GRADUATES PURSUING AN ADVANCED DEGREE

RANK	MAJOR DISCIPLINE	PERCENT
1	Liberal, General Studies	75.0*
2	Computer and Information Sciences	73.7
3	Renewable Natural Resources	62.5*
4	Theology	57.1*
5	Philosophy and Religion	44.4
6.5	Engineering and Engineering-Related Technologies	40.0*
6.5	Agribusiness and Agricultural Production	40.0*
8	Life Sciences	38.7
9	Physical Sciences	37.3
10	Engineering	30.4
11	Home Economics	28.6*
12	Social Sciences	26.9
13	Mathematics	26.2
14.5	Area and Ethnic Studies	25.0*
14.5	Agricultural Sciences	25.0
16	Psychology	24.3
17	Foreign Languages	20.0
18	Letters	18.0
19	Health Sciences	15.1
20	Architecture and Environmental Design	13.3
21	Library and Archival Sciences	10.0
22	Business and Management	7.1
23	Education	6.0
24	Visual and Performing Arts	5.8
25	Multi/Interdisciplinary Studies	4.8
26	Public Affairs	2.9
27	Allied Health	1.3
28	Protective Services	0.0*
29	Parks and Recreation	0.0*
30	Communications	0.0

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES.

An increasing demand for higher level training in the Computer and Information Systems disciplines readily accounts for the very large percentage (73.7%) going on for an advanced degree. Similar factors are operating for graduates in Engineering and Engineering-Related Technologies (40%) and the other disciplines with high rankings on Table 3.05. Master's degree graduates in Theology (57.1%) and in Philosophy and Religion (44.4%) are also more likely to find degree-related employment at the doctoral level rather than the master's degree level, e.g., as a minister of the gospel or as a faculty member in an institution of higher education.

DETAILED ANALYSES OF SELECTED MASTER'S DEGREE DISCIPLINES

As with the lower level graduates, many of the two-digit level categories of Table 3.0 are too generalized for the purposes of users of this report. A selection of major discipline areas from Table 3.0 has therefore been made and findings, at the more detailed four-digit and, in some instances, the six-digit levels of the CIP code, are presented below.

Results for Master's Degree Graduates in Agriculture and Renewable Natural Resources

Table 3.06 breaks out the Agriculture and the Renewable Natural Resources categories of Table 3.0 into more specific degree fields. Although a variety of analyses could be made of the data in Table 3.06 only two will be made here: (1) an analysis of full-time, degree-related Civilian Labor Market employment and (2) an analysis of the rate of full-time employment in Pennsylvania for full-time employed graduates.

In terms of full-time, degree-related, Civilian Labor Market employment, the rank order results were as follows:

RANK	N	DEGREE FIELD	PERCENT
1.5	4	Plant Sciences	100.0
1.5	1	Wildlife Management	100.0
-	15	All Agriculture and Renewable Natural Resources Graduates	66.7
3.5	3	Agricultural Business and Management	66.6
3.5	3	Food Sciences	66.6
5	3	Renewable Natural Resources, General	50.0
6	2	Animal Sciences	00.0

While the number of graduates reported was low for all of the degree fields, it should be noted that there were only three graduates reported for the Animal Sciences, one of whom went on for an advanced degree and the two who were reported as having obtained part-time employment in the Civilian Labor

TABLE 3.06

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR MASTER'S DEGREE GRADUATES IN AGRICULTURE AND IN RENEWABLE NATURAL RESOURCES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Agribusiness and Agricultural Production	#	5	1	1	0	0	0	1	2	0	0
	%		20.0	20.0	.0	.0	.0	20.0	40.0	.0	.0
	%	3	33.3	33.3	.0	.0	.0	33.3			
Agricultural Business and Management	#	5	1	1	0	0	0	1	2	0	0
	%		20.0	20.0	.0	.0	.0	20.0	40.0	.0	.0
	%	3	33.3	33.3	.0	.0	.0	33.3			
Agricultural Sciences	#	12	4	2	1	0	2	0	3	0	0
	%		33.3	16.7	8.3	.0	16.7	.0	25.0	.0	.0
	%	9	44.4	22.2	11.1	.0	22.2	.0			
Animal Sciences	#	3	0	0	0	0	2	0	1	0	0
	%		.0	.0	.0	.0	66.7	.0	33.3	.0	.0
	%	2	.0	.0	.0	.0	100.0	.0			
Food Sciences	#	4	1	1	1	0	0	0	1	0	0
	%		25.0	25.0	25.0	.0	.0	.0	25.0	.0	.0
	%	3	33.3	33.3	33.3	.0	.0	.0			
Plant Sciences	#	5	3	1	0	0	0	0	1	0	0
	%		60.0	20.0	.0	.0	.0	.0	20.0	.0	.0
	%	4	75.0	25.0	.0	.0	.0	.0			
Renewable Natural Resources	#	8	1	1	1	0	0	0	5	0	0
	%		12.5	12.5	12.5	.0	.0	.0	62.5	.0	.0
	%	3	33.3	33.3	33.3	.0	.0	.0			

TABLE 3.06 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Renewable Natural Resources, General	#	7	0	1	1	0	0	0	5	0	0
	%		.0	14.3	14.3	.0	.0	.0	71.4	.0	.0
	%	2	.0	50.0	50.0	.0	.0	.0			
Wildlife Management	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
TOTAL	#	25	6	4	2	0	2	1	10	0	0
	%		24.0	16.0	8.0	.0	8.0	4.0	40.0	.0	.0
	%	15	40.0	26.7	13.3	.0	13.3	6.7			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

Market. In the case of the seven reported graduates in the area of Renewable Natural Resources, five (71.4%) went on for an advanced degree and, of the two who entered the Civilian Labor Market, only one (50.0%) found degree-related employment but that employment was not located in Pennsylvania. In addition, the findings for Wild Life Management graduates must also be treated with caution since only one graduate was reported as being in this discipline. This graduate did, however, find degree-related employment (in Pennsylvania), as shown by the above 100 percent figure for this degree field.

In terms of the proportion of full-time employed graduates who found employment in Pennsylvania, regardless of whether or not it was degree-related employment, the degree fields of Table 3.06 ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
1	1	Wildlife Management	100.0
2	4	Plant Sciences	75.0
3	3	Food Sciences	66.7
-	12	All Agriculture and Renewable Natural Resources Graduates	66.7
4	2	Renewable Natural Resources, General	50.0
5	2	Agricultural Business and Management	50.0

Here again, while the number of graduates is generally low, the findings for Wildlife Management graduates must be treated with special caution since there was only one graduate reported for this discipline. Animal Science graduates do not appear here since they were either employed part-time or were reported as pursuing an advanced degree.

It should also be noted that the Renewable Natural Resources graduate who did find full-time employment in Pennsylvania did not find degree-related employment.

Results for Master's Degree Graduates in Business, Marketing, and Management

Table 3.07 provides a more detailed breakout of the business-oriented disciplines of Table 3.0. These degree fields are ranked below according to the rate of full-time, degree-related, Civilian Labor Market employment.

RANK	N	DEGREE FIELD	PERCENT
1.5	4	Business Economics	100.0
1.5	3	Marketing Management and Research	100.0
3	16	Banking and Finance	93.8
4	20	Labor/Industrial Relations	90.0
5	219	Business Administration and Management	88.1
-	373	All Business, Marketing, and Management Graduates	87.1

TABLE 3.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR MASTER'S DEGREE GRADUATES IN BUSINESS, MARKETING, AND MANAGEMENT, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPAR'D IN PA	EMPLOYED IN FIELD PREPAR'D OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Business and Management, General	#	82	44	18	6	7	0	0	7	0	0
	%		53.7	22.0	7.3	8.5	.0	.0	8.5	.0	.0
	%	75	58.7	24.0	8.0	9.3	.0	.0			
Accounting	#	39	26	4	0	1	1	4	3	0	0
	%		66.7	10.3	.0	2.6	2.6	10.3	7.7	.0	.0
	%	36	72.2	11.1	.0	2.8	2.8	11.1			
Banking and Finance	#	18	12	3	0	0	0	1	1	1	0
	%		66.7	16.7	.0	.0	.0	5.6	5.6	5.6	.0
	%	16	75.0	18.8	.0	.0	.0	6.3			
Business Administration and Management	#	230	92	101	0	2	3	21	6	2	3
	%		40.0	43.9	.0	.9	1.3	9.1	2.6	.9	1.3
	%	219	42.0	46.1	.0	.9	1.4	9.6			
Business Economics	#	11	3	1	0	0	0	0	7	0	0
	%		27.3	9.1	.0	.0	.0	.0	63.6	.0	.0
	%	4	75.0	25.0	.0	.0	.0	.0			
Labor/Industrial Relations	#	21	10	8	0	0	0	2	1	0	0
	%		47.6	38.1	.0	.0	.0	9.5	4.8	.0	.0
	%	20	50.0	40.0	.0	.0	.0	10.0			
Management Science	#	1	0	0	0	0	0	0	1	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			

TABLE 3.07 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Marketing Management and Research	#	3	3	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	3	100.0	.0	.0	.0	.0	.0			
Organizational Behavior	#	1	0	0	0	0	0	0	1	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
Business and Management, Other	#	2	0	0	0	0	0	0	2	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
TOTAL	#	408	190	135	6	10	4	28	29	3	3
	%		46.6	33.1	1.5	2.5	1.0	6.9	7.1	.7	.7
	%	373	50.9	36.2	1.6	2.7	1.1	7.5			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

6	36	Accounting	83.3
7	75	Business and Management, General	82.7
-	0	Management Science	NA
-	0	Organizational Behavior	NA
-	0	Business and Management, Other	NA

The 1983 graduates in Business and Management had little difficulty finding degree-related employment when they entered the Civilian Labor Market. The exceptions were characterized by graduates who went on for an advanced degree rather than entering the Civilian Labor Market. This is probably because of the more scholarly nature of these degree fields, e.g., Management Science and Organizational Behavior.

When the proportion of full-time employed graduates who found full-time employment in Pennsylvania is considered, the degree fields of Table 3.07 rank as follows:

RANK	N	DEGREE FIELD	PERCENT
1	3	Marketing Management and Research	100.0
2	31	Accounting	83.9
3	15	Banking and Finance	80.0
4	4	Business Economics	75.0
5	75	Business and Management, General	66.7
-	341	All Business, Marketing, and Management Graduates	57.5
6	18	Labor/Industrial Relations	55.5
7	195	Business Administration and Management	47.2

It is worth noting here that the disciplines in this list seem to be characterized, as a whole, by a relatively high level of degree-related Pennsylvania based employment and virtually no full-time employment that is not related to their degrees. If they are not employed full-time in a degree-related position, they tend to remain unemployed rather than seeking part-time work. Apparently, they persist in seeking degree-related, full-time employment despite the period of unemployment that might be required (see Table 3.07).

Results for Master's Degree Graduates in Education

The major discipline of Education, found in Table 3.0, represents a large and diverse group of related specialties with varying degrees of labor market demand. For this reason, Table 3.08 has a large number of degree fields and the level of analysis used ranges from the four-digit level to the six-digit level in order to do justice to these specialties.

When the degree fields of Table 3.08 were ranked on the basis of the proportion of graduates in each discipline who found full-time, degree-related employment in the Civilian Labor Market the results were as follows:

TABLE 3.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR MASTER'S DEGREE GRADUATES IN EDUCATION, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Education, General	#	7	2	2	3	0	0	0	0	0	0
	%		28.6	28.6	42.9	.0	.0	.0	.0	.0	.0
	%	7	28.6	28.6	42.9	.0	.0	.0			
Curriculum and Instruction	#	30	13	2	0	0	5	4	4	1	1
	%		43.3	6.7	.0	.0	16.7	13.3	13.3	3.3	3.3
	%	24	54.2	8.3	.0	.0	20.8	16.7			
Education Administration	#	28	12	5	1	3	0	4	2	0	1
	%		42.8	17.9	3.6	10.7	.0	14.3	7.1	.0	3.6
	%	25	48.0	20.0	4.0	12.0	.0	16.0			
Evaluation and Research	#	2	1	1	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0	.0	.0	.0
School Psychology	#	31	12	4	8	0	1	2	4	0	0
	%		38.7	12.9	25.8	.0	3.2	6.5	12.9	.0	.0
	%	27	44.4	14.8	29.6	.0	3.7	7.4			
Social Foundations	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
Special Education	#	168	98	49	3	1	2	9	6	0	0
	%		58.3	29.2	1.8	.6	1.2	5.4	3.6	.0	.0
	%	162	60.5	30.2	1.9	.6	1.2	5.6			

TABLE 3.08 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Special Education, General	#	63	42	16	0	1	0	1	3	0	0
	%		66.7	25.4	.0	1.6	.0	1.6	4.8	.0	.0
	%	60	70.0	26.7	.0	1.7	.0	1.7			
Education of the Deaf and Hearing Impaired	#	4	1	1	0	0	0	2	0	0	0
	%		25.0	25.0	.0	.0	.0	50.0	.0	.0	.0
	%	4	25.0	25.0	.0	.0	.0	50.0			
Education of the Mentally Handicapped	#	20	14	6	0	0	0	0	0	0	0
	%		70.0	30.0	.0	.0	.0	.0	.0	.0	.0
	%	20	70.0	30.0	.0	.0	.0	.0			
Education of the Multiple Handicapped	#	11	3	2	2	0	1	0	3	0	0
	%		27.3	18.2	18.2	.0	9.1	.0	27.3	.0	.0
	%	8	37.5	25.0	25.0	.0	12.5	.0			
Specific Learning Disabilities	#	6	6	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	6	100.0	.0	.0	.0	.0	.0			
Speech Correction	#	31	17	9	0	0	1	4	0	0	0
	%		54.8	29.0	.0	.0	3.2	12.9	.0	.0	.0
	%	31	54.8	29.0	.0	.0	3.2	12.9			
Special Education, Other	#	33	15	15	1	0	0	2	0	0	0
	%		45.5	45.5	3.0	.0	.0	6.1	.0	.0	.0
	%	33	45.5	45.5	3.0	.0	.0	6.1			
Student Counseling and Personnel Services	#	125	50	9	36	2	6	10	7	2	3
	%		40.0	7.2	28.8	1.6	4.8	8.0	5.6	1.6	2.4
	%	113	44.2	8.0	31.9	1.8	5.3	8.8			

TABLE 3.08 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Teacher Education, General Programs	#	109	69	21	0	2	5	1	7	0	4
	%		63.3	19.3	.0	1.8	4.6	.9	6.4	.0	3.7
	%	98	70.4	21.4	.0	2.0	5.1	1.0			
Elementary Education	#	84	55	15	0	2	4	1	4	0	3
	%		65.5	17.9	.0	2.4	4.8	1.2	4.8	.0	3.6
	%	77	71.4	19.5	.0	2.6	5.2	1.3			
Secondary Education	#	13	6	5	0	0	0	0	1	4	1
	%		46.2	38.5	.0	.0	.0	.0	7.7	.0	7.7
	%	11	54.5	45.5	.0	.0	.0	.0			
Early Childhood Education	#	5	4	0	0	0	1	0	0	0	0
	%		80.0	.0	.0	.0	20.0	.0	.0	.0	.0
	%	5	80.0	.0	.0	.0	20.0	.0			
Teacher Education, Specific Subject Areas	#	198	115	24	18	1	12	12	12	2	2
	%		58.1	12.1	9.1	.5	6.1	6.1	6.1	1.0	1.0
	%	182	63.2	13.2	9.9	.5	6.6	6.6			
Agricultural Education	#	11	8	0	1	0	0	0	2	0	0
	%		72.7	.0	9.1	.0	.0	.0	18.2	.0	.0
	%	9	88.9	.0	11.1	.0	.0	.0			
Art Education	#	9	7	1	0	0	0	1	0	0	0
	%		77.8	11.1	.0	.0	.0	11.1	.0	.0	.0
	%	9	77.8	11.1	.0	.0	.0	11.1			
Business Education	#	3	2	1	0	0	0	0	0	0	0
	%		66.7	33.3	.0	.0	.0	.0	.0	.0	.0
	%	3	66.7	33.3	.0	.0	.0	.0			

TABLE 3.08 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
English Education	#	2	2	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	2	100.0	.0	.0	.0	.0	.0			
Health Education	#	9	2	1	1	0	3	2	0	0	0
	%		22.2	11.1	11.1	.0	33.3	22.2	.0	.0	.0
	%	9	22.2	11.1	11.1	.0	33.3	22.2			
Home Economics Education	#	16	9	1	0	0	3	0	3	0	0
	%		56.3	6.3	.0	.0	18.8	.0	18.8	.0	.0
	%	13	69.2	7.7	.0	.0	23.1	.0			
Industrial Arts Education	#	14	10	1	1	0	0	1	1	0	0
	%		71.4	7.1	7.1	.0	.0	7.1	7.1	.0	.0
	%	13	76.9	7.7	7.7	.0	.0	7.7			
Mathematics Education	#	5	3	0	0	0	0	0	1	1	0
	%		60.0	.0	.0	.0	.0	.0	20.0	20.0	.0
	%	3	100.0	.0	.0	.0	.0	.0			
Music Education	#	15	9	2	1	0	1	1	0	0	1
	%		60.0	13.3	6.7	.0	6.7	6.7	.0	.0	6.7
	%	14	64.3	14.3	7.1	.0	7.1	7.1			
Physical Education	#	22	8	6	2	0	1	4	1	0	0
	%		36.4	27.3	9.1	.0	4.5	18.2	4.5	.0	.0
	%	21	38.1	28.6	9.5	.0	4.8	19.0			
Reading Education	#	76	45	8	10	1	4	2	4	1	1
	%		59.2	10.5	13.2	1.3	5.3	2.6	5.3	1.3	1.3
	%	70	64.3	11.4	14.3	1.4	5.7	2.9			

TABLE 3.08 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Science Education	#	5	2	1	1	0	0	1	0	0	0
	%		40.0	20.0	20.0	.0	.0	20.0	.0	.0	.0
	%	5	40.0	20.0	20.0	.0	.0	20.0			
Social Science Education	#	2	2	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	2	100.0	.0	.0	.0	.0	.0			
Trade and Industrial Education	#	2	1	0	1	0	0	0	0	0	0
	%		50.0	.0	50.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	.0	50.0	.0	.0	.0			
Physics/Math Education	#	4	4	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	4	100.0	.0	.0	.0	.0	.0			
Environmental Education	#	2	1	1	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0			
Teacher Education, Specific Subject Areas, Other	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
Teaching English as a Second/Foreign Language	#	5	3	1	0	0	0	0	0	0	1
	%		60.0	20.0	.0	.0	.0	.0	.0	.0	20.0
	%	4	75.0	25.0	.0	.0	.0	.0			
TOTAL	#	704	376	118	69	9	31	42	42	5	12
	%		53.4	16.8	9.8	1.3	4.4	6.0	6.0	.7	1.7
	%	645	58.3	18.3	10.7	1.4	4.8	6.5			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

RANK	N	DEGREE FIELD	PERCENT
7	2	Evaluation and Research	100.0
7	1	Social Foundations	100.0
7	20	Education of the Mentally Handicapped	100.0
7	6	Specific Learning Disabilities	100.0
7	11	Secondary Education	100.0
7	3	Business Education	100.0
7	2	English Education	100.0
7	3	Mathematics Education	100.0
7	2	Social Science Education	100.0
7	4	Physics/Math Education	100.0
7	2	Environmental Education	100.0
7	1	Teacher Education, Specific Subject Areas, Other	100.0
7	4	Teaching English as a Second/Foreign Language	100.0
14	60	Special Education, General	96.7
15	33	Special Education, Other	91.0
16	77	Elementary Education	90.9
17.5	9	Agricultural Education	88.9
17.5	9	Art Education	88.9
19	13	Industrial Arts Education	84.6
20	31	Speech Correction	83.8
21	5	Early Childhood Education	80.0
22	14	Music Education	78.6
23	13	Home Economics Education	76.9
-	645	All Education Graduates	76.6
24	70	Reading Education	75.7
25	25	Education Administration	68.0
26	21	Physical Education	66.7
27.5	24	Curriculum and Instruction	62.5
27.5	8	Education of the Multiple Handicapped	62.5
29	5	Science Education	60.0
30	27	School Psychology	59.2
31	7	Education, General	57.2
32	113	Student Counseling and Personnel Services	52.2
33.5	4	Education of the Deaf and Hearing Impaired	50.0
33.5	2	Trade and Industrial Education	50.0
35	9	Health Education	33.3

It is noteworthy that twenty-five of the thirty-five fields ranked had at least sixty-five percent of their graduates finding degree-related employment when they entered the Civilian Labor Market. Only graduates in the area of Health Education had less than fifty percent finding such employment. Inspection of Table 3.08 reveals that five of the nine graduates in Health Education were either working part-time or were unemployed.

The rankings for the degree fields of Evaluation and Research; Social Foundations; English Education; Social Science Education; Trade and Industrial Education; Environmental Education; and Teacher Education, Other Specific Subject Areas; must be interpreted with caution since these degree fields had only one or two graduates in the Civilian Labor Market.

When the Education degree fields were ranked according to the proportion of full-time employed graduates finding employment in Pennsylvania, the results were as follows:

RANK	N	DEGREE FIELD	PERCENT
5	1	Social Foundations of Education	100.0
5	6	Specific Learning Disabilities	100.0
5	9	Agricultural Education	100.0
5	2	English Education	100.0
5	3	Mathematics Education	100.0
5	2	Social Science Education	100.0
5	2	Trade and Industrial Arts Education	100.0
5	4	Physics/Math Education	100.0
10	12	Industrial Arts Education	91.7
11	10	Home Economics Education	90.0
12	97	Student Counseling and Personnel Services	88.7
13	8	Art Education	87.5
14	15	Curriculum and Instruction	86.7
15	64	Reading Education	85.9
16.5	24	School Psychology	83.3
16.5	12	Music Education	83.3
-	572	All Education Graduates	77.8
18	72	Elementary Education	76.4
20	4	Teaching English as a Second/Foreign Language	75.0
20	4	Science Education	75.0
20	4	Health Education	75.0
22.5	7	Education, General	71.4
22.5	7	Education of the Multiple Handicapped	71.4
24	59	Special Education, General	71.2
25	20	Education of the Mentally Handicapped	70.0
26	3	Business Education	66.7
27	26	Speech Correction	65.4
28	16	Physical Education	62.5
29	21	Education Administration	61.9
30	11	Secondary Education	54.5
31	31	Special Education, Other	51.6
33	2	Evaluation and Research	50.0
33	2	Education of the Deaf and Hearing Impaired	50.0
33	2	Environmental Education	50.0
35	1	Teacher Education, Specific Subject Areas, Other	0.0

The lower ranked degree fields of this listing seem to be those for which a strong National Labor Market rather than a strong Pennsylvania Labor Market can be reasonably assumed to exist.

Results for Master's Degree Graduates in Engineering

Table 3.09 gives a breakout of various Engineering degree fields within the major discipline of Engineering found in Table 3.0.

TABLE 3.09

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR MASTER'S DEGREE GRADUATES IN ENGINEERING, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Aerospace, Aeronautical, and Astronautical Engineering	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
Agricultural Engineering	#	7	0	1	0	0	0	4	2	0	0
	%		.0	14.3	.0	.0	.0	57.1	28.6	.0	.0
	%	5	.0	20.0	.0	.0	.0	80.0			
Architectural Engineering	#	2	0	2	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	2	.0	100.0	.0	.0	.0	.0			
Bioengineering and Biomedical Engineering	#	2	0	1	0	0	0	1	0	0	0
	%		.0	50.0	.0	.0	.0	50.0	.0	.0	.0
	%	2	.0	50.0	.0	.0	.0	50.0			
Ceramic Engineering	#	4	1	2	0	0	0	0	1	0	0
	%		25.0	50.0	.0	.0	.0	.0	25.0	.0	.0
	%	3	33.3	66.7	.0	.0	.0	.0			
Chemical Engineering	#	25	5	9	0	1	0	2	7	1	0
	%		20.0	36.0	.0	4.0	.0	8.0	28.0	4.0	.0
	%	17	29.4	52.9	.0	5.9	.0	11.8			
Civil Engineering	#	23	7	11	0	0	0	0	3	2	0
	%		30.4	47.8	.0	.0	.0	.0	13.0	8.7	.0
	%	18	38.9	61.1	.0	.0	.0	.0			

TABLE 3.09 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Computer Engineering	#	8	0	2	0	0	0	0	6	0	0
	%		.0	25.0	.0	.0	.0	.0	75.0	.0	.0
	%	2	.0	100.0	.0	.0	.0	.0			
Electrical, Electronics, and Communications Engineering	#	16	4	4	0	0	0	0	8	0	0
	%		25.0	25.0	.0	.0	.0	.0	50.0	.0	.0
	%	8	50.0	50.0	.0	.0	.0	.0			
Engineering Mechanics	#	3	1	0	0	0	0	0	0	1	1
	%		33.3	.0	.0	.0	.0	.0	.0	33.3	33.3
	%	1	100.0	.0	.0	.0	.0	.0			
Engineering Science	#	15	9	4	1	0	0	0	0	1	0
	%		60.0	26.7	6.7	.0	.0	.0	.0	6.7	.0
	%	14	64.3	28.6	7.1	.0	.0	.0			
Industrial Engineering	#	9	2	3	1	0	0	1	1	1	0
	%		22.2	33.3	11.1	.0	.0	11.1	11.1	11.1	.0
	%	7	28.6	42.9	14.3	.0	.0	14.3			
Materials Engineering	#	6	0	1	0	0	0	3	2	0	0
	%		.0	16.7	.0	.0	.0	50.0	33.3	.0	.0
	%	4	.0	25.0	.0	.0	.0	75.0			
Mechanical Engineering	#	30	10	11	0	0	0	0	8	1	0
	%		33.3	36.7	.0	.0	.0	.0	26.7	3.3	.0
	%	21	47.6	52.4	.0	.0	.0	.0			
Metallurgical Engineering	#	17	1	0	0	1	0	1	14	0	0
	%		5.9	.0	.0	5.9	.0	5.9	82.4	.0	.0
	%	3	33.3	.0	.0	33.3	.0	33.3			

TABLE 3.09 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Mining and Mineral Engineering	#	8	0	4	0	1	0	1	2	0	0
	%		.0	50.0	.0	12.5	.0	12.5	25.0	.0	.0
	%	6	.0	66.7	.0	16.7	.0	16.7			
Nuclear Engineering	#	13	7	2	0	0	0	0	4	0	0
	%		53.8	15.4	.0	.0	.0	.0	30.8	.0	.0
	%	9	77.8	22.2	.0	.0	.0	.0			
Petroleum Engineering	#	2	0	2	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	2	.0	100.0	.0	.0	.0	.0			
TOTAL	#	191	47	60	2	3	0	13	58	7	1
	%		24.6	31.4	1.0	1.6	.0	6.8	30.4	3.7	.5
	%	125	37.6	48.0	1.6	2.4	.0	10.4			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

When the degree fields of Engineering were ranked with regard to the proportion of master's degree graduates in the Civilian Labor Market who found full-time, degree-related employment, these degree fields ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
5.5	1	Aerospace, Aeronautical and Astronautical Engineering	100.0
5.5	2	Architectural Engineering	100.0
5.5	3	Ceramic Engineering	100.0
5.5	18	Civil Engineering	100.0
5.5	2	Computer Engineering	100.0
5.5	8	Electrical, Electronics and Communications Engineering	100.0
5.5	1	Engineering Mechanics	100.0
5.5	21	Mechanical Engineering	100.0
5.5	9	Nuclear Engineering	100.0
5.5	2	Petroleum Engineering	100.0
11	14	Engineering Science	92.9
-	125	All Engineering Graduates	85.6
12	17	Chemical Engineering	82.3
13	7	Industrial Engineering	71.5
14	6	Mining and Mineral Engineering	66.7
15	2	Bioengineering and Biomedical Engineering	50.0
16	3	Metallurgical Engineering	33.3
17	4	Materials Engineering	25.0
18	5	Agricultural Engineering	20.0

The rankings for Aerospace, Aeronautical and Astronautical Engineering; Architectural Engineering; Bioengineering and Biomedical Engineering; and Petroleum Engineering should be used with especial caution because of the low number of graduates in each of these disciplines, i.e., one or two graduates. The general findings are, however, no surprise. Engineering graduates, as a whole, have not had difficulty finding degree-related employment. The exceptions in this listing are, therefore, noteworthy, i.e.; Agricultural Engineering, Materials Engineering, Metallurgical Engineering, and Mining and Mineral Engineering. These are degree fields where there apparently was little demand relative to the supply of graduates available.

A glance at Table 3.09 reveals that, with few exceptions, the labor market for engineers is a national or even an international market with relatively few engineers finding full-time employment in Pennsylvania. When the degree fields of Table 3.09 were ranked with regard to the proportion of master's degree graduates in engineering who found full-time employment in Pennsylvania, the results were:

RANK	N	DEGREE FIELD	PERCENT
1	1	Engineering Mechanics	100.0
2	9	Nuclear Engineering	77.8
3	14	Engineering Science	71.4

4	8	Electrical, Electronics, and Communications Engineering	50.0
5.5	6	Industrial Engineering	50.0
5.5	2	Metallurgical Engineering	50.0
7	21	Mechanical Engineering	47.6
-	112	All Engineering Graduates	43.8
8	18	Civil Engineering	38.9
9.5	3	Ceramic Engineering	33.3
9.5	15	Chemical Engineering	33.3
14.5	1	Aerospace, Aeronautical and Astronautical Engineering	0.0
14.5	1	Agricultural Engineering	0.0
14.5	2	Architectural Engineering	0.0
14.5	1	Bioengineering and Biomedical Engineering	0.0
14.5	2	Computer Engineering	0.0
14.5	1	Materials Engineering	0.0
14.5	5	Mining and Mineral Engineering	0.0
14.5	2	Petroleum Engineering	0.0

Results for Master's Degree Graduates in the Engineering and Engineering-Related Technologies

Although the engineering and engineering-related technologies, at the master's degree level, are not a major part of the higher education curriculum, Table 3.10 indicates that Pennsylvania institutions do graduate some individuals with degrees in the areas of Environmental Control Technologies and of Miscellaneous Engineering-Related Technologies. The employment picture found in Table 3.10 is, however, not as positive as that for the engineering graduates of Table 3.09, with fifty percent of the four Environmental Control graduates unemployed and the other fifty percent listed as employed in a degree-related, full-time position in Pennsylvania. Graduates in the degree field of Miscellaneous Engineering Technologies either went on for an advanced degree (66.7%) or, if they entered the Civilian Labor Market, found degree-related employment outside of Pennsylvania.

Results for Master's Degree Graduates in the Allied Health Professions

Table 3.11 breaks out the degree fields contained in the major discipline area of Allied Health found to Table 3.0. The most striking feature of Table 3.11 is a relative lack of employment that is not degree-related and, with the exception of Music Therapy degree holders and of graduates in Speech-Language Pathology/Audiology, there is a strong tendency to find degree-related employment in Pennsylvania.

When ranked by the proportion finding full-time, degree-related employment in the Civilian Labor Market, the following results were obtained:

TABLE 3.10

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR MASTER'S DEGREE GRADUATES IN THE ENGINEERING AND ENGINEERING-RELATED TECHNOLOGIES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Environmental Control Technologies	#	4	2	0	0	0	0	2	0	0	0
	%		50.0	.0	.0	.0	.0	50.0	.0	.0	.0
	%	4	50.0	.0	.0	.0	.0	50.0			
Engineering and Engineering Related Technologies, Other	#	6	0	2	0	0	0	0	4	0	0
	%		.0	33.3	.0	.0	.0	.0	66.7	.0	.0
	%	2	.0	100.0	.0	.0	.0	.0			
TOTAL	#	10	2	2	0	0	0	2	4	0	0
	%		20.0	20.0	.0	.0	.0	20.0	40.0	.0	.0
	%	6	33.3	33.3	.0	.0	.0	33.3			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

TABLE 3.11

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR MASTER'S DEGREE GRADUATES IN THE ALLIED HEALTH PROFESSIONS, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Rehabilitation Counseling	#	25	18	4	0	0	0	2	1	0	0
	%		72.0	16.0	.0	.0	.0	8.0	4.0	.0	.0
	%	24	75.0	16.7	.0	.0	.0	8.3			
Art Therapy	#	20	14	5	0	0	1	0	0	0	0
	%		70.0	25.0	0	.0	5.0	.0	.0	.0	.0
	%	20	70.0	25.0	.0	.0	5.0	.0			
Dance Therapy	#	8	6	2	0	0	0	0	0	0	0
	%		75.0	25.0	.0	.0	.0	.0	.0	.0	.0
	%	8	75.0	25.0	.0	.0	.0	.0			
Music Therapy	#	6	1	2	1	0	1	0	0	0	0
	%		16.7	33.3	16.7	.0	16.7	.0	.0	.0	.0
	%	5	20.0	40.0	20.0	.0	20.0	.0			
Speech-Language Pathology/Audiology	#	8	4	4	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	8	50.0	50.0	.0	.0	.0	.0			
Allied Health, Other	#	8	8	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	8	100.0	.0	.0	.0	.0	.0			
TOTAL	#	75	51	17	1	0	2	2	1	0	1
	%		68.0	22.7	1.3	.0	2.7	2.7	1.3	.0	1.3
	%	73	69.9	23.3	1.4	.0	2.7	2.7			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

RANK	N	DEGREE FIELD	PERCENT
1	8	Dance Therapy	100.0
2	8	Speech-Language Pathology/Audiology	100.0
2	8	Allied Health, Other	100.0
4	20	Art Therapy	95.0
-	73	All Allied Health Graduates	93.2
5	24	Rehabilitation Counseling	91.7
6	5	Music Therapy	60.0

When ranked according to the proportion of full-time employed graduates obtaining full-time employment in Pennsylvania, they ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
1	8	Allied Health, Other	100.0
2.5	22	Rehabilitation Counseling	81.8
-	69	All Allied Health Graduates	75.4
2.5	8	Dance Therapy	75.0
4	19	Art Therapy	73.7
5.5	8	Speech-Language Pathology/Audiology	50.0
5.5	4	Music Therapy	50.0

Results for Master's Degree Graduates in the Health Sciences

Table 3.12 breaks out the Health Sciences category of Table 3.0. It gives postgraduate activity distributions for specific health science areas such as: Nursing, Audiology and Speech Pathology, etc. Here again, there is a pattern of a high level of degree-related, full-time employment. The only exception is that of Basic Clinical Health Science graduates who typically went on for an advanced degree (55.6%). When these graduates did enter the Civilian Labor Market it is apparent that they also tended to find degree-related, full-time employment that is located in Pennsylvania.

When the degree fields of Table 3.12 were ranked as to the proportion obtaining degree-related full-time employment in the Civilian Labor Market, the results were as follows:

RANK	N	DEGREE FIELD	PERCENT
2.5	4	Basic Clinical Health Sciences	100.0
2.5	6	Medicine	100.0
2.5	1	Pharmacy	100.0
2.5	1	Health Sciences, Other	100.0
5	46	Nursing	95.7

TABLE 3.12

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR MASTER'S DEGREE GRADUATES IN THE HEALTH SCIENCES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED: IN PA	EMPLOYED IN FIELD PREPARED: OUTSIDE PA	EMPLOYED IN OTHER FIELD: IN PA	EMPLOYED IN OTHER FIELD: OUTSIDE PA	EMPLOYED PART-TIME	UNEMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Audiology and Speech Pathology	#	19	8	6	1	0	3	1	0	0	0
	%		42.1	31.5	5.3	.0	15.8	5.3	.0	.0	.0
	%	19	42.1	31.5	5.3	.0	15.8	5.3			
Basic Clinical Health Sciences	#	9	3	1	0	0	0	0	5	0	0
	%		33.3	11.1	.0	.0	.0	.0	55.6	.0	.0
	%	4	75.0	25.0	.0	.0	.0	.0			
Medicine	#	7	3	3	0	0	0	0	1	0	0
	%		42.9	42.9	.0	.0	.0	.0	14.3	.0	.0
	%	6	50.0	50.0	.0	.0	.0	.0			
Nursing	#	48	39	5	0	0	0	2	2	0	0
	%		81.3	10.4	.0	.0	.0	4.2	4.2	.0	.0
	%	46	84.8	10.9	.0	.0	.0	4.3			
Pharmacy	#	2	0	1	0	0	0	0	1	0	0
	%		.0	50.0	.0	.0	.0	.0	50.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
Health Sciences, Other	#	8	1	0	0	0	0	0	5	0	2
	%		12.5	.0	.0	.0	.0	.0	62.5	.0	25.0
	%	1	100.0	.0	.0	.0	.0	.0			
TOTAL	#	93	54	16	1	0	3	3	14	0	2
	%		58.1	17.2	1.1	.0	3.2	3.2	15.1	.0	2.2
	%	77	70.1	10.8	1.3	.0	3.9	3.9			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

-	77	All Health Science Graduates	80.9
6	19	Audiology and Speech Pathology	73.6

When ranked according to the proportion of full-time employed graduates finding full-time employment in Pennsylvania, the results were as follows:

RANK	N	DEGREE FIELD	PERCENT
1	1	Health Sciences, Other	100.0
2	44	Nursing	88.6
-	71	All Health Science Graduates	77.5
3	4	Basic Clinical Health Sciences	75.0
4	15	Audiology and Speech Pathology	60.0
5	6	Medicine	50.0
6	1	Pharmacy	0.0

Caution should be exercised in evaluating the findings for graduates in Pharmacy and in the Clinical Health Sciences, Other categories because of the small number of graduates reported in each of these degree fields.

Results for Master's Degree Graduates in the Physical Sciences

Table 3.13 breaks out specific degree fields from the Physical Science category of Table 3.0. Inspection of this table indicates that for many of these degree fields the master's degree is not seen as the terminal degree for employment in that field. As a result, substantial proportions of these graduates go on to course work leading to an advanced degree, e.g., graduates in Astronomy, Chemistry, and Physics.

When the degree fields of Table 3.13 were ranked according to the proportion of master's degree graduates finding full-time, degree-related employment in the Civilian Labor Market, the following ranking of these physical sciences resulted:

RANK	N	DEGREE FIELD	PERCENT
1.5	3	Atmospheric Sciences and Meteorology	100.0
1.5	3	Geological Sciences	100.0
3	20	Chemistry	90.0
-	40	All Physical Science Graduates	77.5
4	8	Miscellaneous Physical Sciences	62.5
5	2	Physics	50.0
6	4	Physical Sciences, Other	25.0

Astronomy is not listed since only one graduate in Astronomy was reported, and that graduate had gone on for an advanced degree. Graduates in Physics

TABLE 3.13

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR MASTER'S DEGREE GRADUATES IN THE PHYSICAL SCIENCES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Astronomy	#	1	0	0	0	0	0	0	1	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
Atmospheric Sciences and Meteorology	#	4	0	3	0	0	0	0	0	1	0
	%		.0	75.0	.0	.0	.0	.0	.0	25.0	.0
	%	3	.0	100.0	.0	.0	.0	.0			
Chemistry	#	33	9	9	0	0	0	2	13	0	0
	%		27.3	27.3	.0	.0	.0	6.1	39.4	.0	.0
	%	20	45.0	45.0	.0	.0	.0	10.0			
Geological Sciences	#	5	0	3	0	0	0	0	1	0	1
	%		.0	60.0	.0	.0	.0	.0	20.0	.0	20.0
	%	3	.0	100.0	.0	.0	.0	.0			
Miscellaneous Physical Sciences	#	8	4	1	2	1	0	0	0	0	0
	%		50.0	12.5	25.0	12.5	.0	.0	.0	.0	.0
		8	50.0	12.5	25.0	12.5	.0	.0			
Physics	#	12	0	1	1	0	0	0	10	0	0
	%		.0	8.3	8.3	.0	.0	.0	83.3	.0	.0
	%	2	.0	50.0	50.0	.0	.0	.0			

TABLE 3.13 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Physical Sciences, Other	#	4	0	1	0	1	0	2	0	0	0
	%		.0	25.0	.0	25.0	.0	50.0	.0	.0	.0
	%	4	.0	25.0	.0	25.0	.0	50.0			
TOTAL	#	67	13	18	3	2	0	4	25	1	1
	%		19.4	26.9	4.5	3.0	.0	6.0	37.3	1.5	1.5
	%	40	32.5	45.0	7.5	5.0	.0	10.0			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

also tended to go on for an advanced degree (83.3%). Of those Physics graduates who did enter the Civilian Labor Market only 50 percent had found full-time, degree-related employment. The Physical Science, Other degree graduates were, for the most part, unemployed (50 percent) with none of them going on for an advanced degree.

When the Physical Science degree fields were ranked with regard to the proportion of full-time employed graduates finding full-time employment in Pennsylvania, the results were as follows:

RANK	N	DEGREE FIELD	PERCENT
1	8	Miscellaneous Physical Sciences	75.0
2.5	2	Physics	50.0
2.5	18	Chemistry	50.0
-	36	All Physical Science Graduates	44.4
5	3	Atmospheric Sciences and Meteorology	0.0
5	3	Geological Sciences	0.0
6	2	Physical Sciences, Other	0.0

Again, the degree field of Astronomy is not listed because there were no astronomy graduates in the Civilian Labor Market. It should also be noted that, in the case of the graduates in the field of Physics, half of the Physics graduates who found employment in Pennsylvania did not find employment which was degree-related. The overall picture is, moreover, one of national rather than Pennsylvania based labor market demand.

Results for Master's Degree Graduates in Psychology

It is only at the graduate level that the discipline of Psychology becomes truly differentiated as to area of specialization. It is for this reason that no attempt was made to break out this major discipline at the baccalaureate level. Table 3.14 gives the postgraduate activity distributions for various areas of specialization within the major discipline of Psychology at the master's degree level but, even here, the degree of specialization is still relatively limited.

When the degree fields of Table 3.14 were ranked according to the proportion of master's degree graduates finding full-time, degree-related employment in the Civilian Labor Market the following ranking resulted:

RANK	N	DEGREE FIELD	PERCENT
1	5	Clinical Psychology	100.0
2	18	Psychology, Other	94.4
-	79	All Psychology Graduates	76.0
3	48	Psychology, General	68.8
4.5	2	Community Psychology	50.0
4.5	6	Social Psychology	50.0

TABLE 3.14

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR MASTER'S DEGREE GRADUATES IN PSYCHOLOGY, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Psychology, General	#	68	31	2	5	5	2	3	19	0	1
	%		45.6	2.9	7.4	7.4	2.9	4.4	27.9	.0	1.5
	%	48	64.6	4.2	10.4	10.4	4.2	6.3			
Clinical Psychology	#	6	5	0	0	0	0	0	0	0	1
	%		83.3	.0	.0	.0	.0	.0	.0	.0	16.7
	%	5	100.0	.0	.0	.0	.0	.0			
Community Psychology	#	7	1	1	0	0	0	0	5	0	0
	%		14.3	14.3	.0	.0	.0	.0	71.4	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0			
Social Psychology	#	6	2	1	0	0	0	3	0	0	0
	%		33.3	16.7	.0	.0	.0	50.0	.0	.0	.0
	%	6	33.3	16.7	.0	.0	.0	50.0			
Psychology, Other	#	20	17	0	1	0	0	0	2	0	0
	%		85.0	.0	5.0	.0	.0	.0	10.0	.0	.0
	%	18	94.4	.0	5.6	.0	.0	.0			
TOTAL	#	107	56	4	6	5	2	6	26	0	2
	%		52.3	3.7	5.6	4.7	1.9	5.6	24.3	.0	1.9
	%	79	70.9	5.1	7.6	6.3	2.5	7.6			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

It should be noted that 50 percent of the Social Psychology graduates were also unemployed, that 27.9 percent of the General Psychology graduates went on to obtain an advanced degree and that only two of the seven (28%) Community Psychology graduates were still in the Civilian Labor Market with another five (71.4%) going on for an advanced degree.

When ranked as to the proportion of full-time employed graduates obtaining employment in Pennsylvania, the results were as follows:

RANK	N	DEGREE FIELD	PERCENT
1.5	5	Clinical Psychology	100.0
1.5	18	Psychology, Other	100.0
-	71	All Psychology Graduates	87.3
3	43	Psychology, General	76.6
4	3	Social Psychology	66.7
5	2	Community Psychology	50.0

Most of the observed Pennsylvania employment was, moreover, degree-related employment. The employment pattern for General Psychology graduates was the exception with a substantial portion of the observed full-time employment unrelated to the degree field of Psychology.

Results for Master's Degree Graduates in the Social Sciences

Table 3.15 breaks out the specific degree fields within the major discipline category of Social Sciences that is found in Table 3.0.

When the Social Science degree fields of Table 3.15 were ranked according to the proportion of graduates in the civilian labor market who found full-time, degree-related employment the results were ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
1	1	Social Sciences, Other	100.0
2	22	Political Science and Government	68.2
3	3	Social Sciences, General	66.7
-	64	All Social Science Graduates	62.6
4	19	History	57.9
5	7	Sociology	57.2
6	7	Geography	57.1
7	2	Criminology	50.0
8	3	Economics	33.3

The pattern here is one of more than half (62.6%) of these graduates finding degree-related employment with the proportions finding such employment ranging from 33.3 percent to 100.0 percent. Only the degree fields of Criminology

TABLE 3.15

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR MASTER'S DEGREE GRADUATES IN THE SOCIAL SCIENCES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Social Sciences, General	#	3	2	0	0	0	0	1	0	0	0
	%		66.7	.0	.0	.0	.0	33.3	.0	.0	.0
	%	3	66.7	.0	.0	.0	.0	33.3			
Anthropology	#	1	0	0	0	0	0	0	1	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
Criminology	#	2	1	1	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0			
Economics	#	4	0	1	1	1	0	0	1	0	0
	%		.0	25.0	25.0	25.0	.0	.0	25.0	.0	.0
	%	3	.0	33.3	33.3	33.3	.0	.0			
Geography	#	7	3	1	3	0	0	0	0	0	0
	%		42.9	14.2	42.9	.0	.0	.0	.0	.0	.0
	%	7	42.9	14.2	42.9	.0	.0	.0			
History	#	33	7	4	2	6	0	0	12	1	1
	%		21.2	12.1	6.1	18.2	.0	.0	36.4	3.0	3.0
	%	19	36.8	21.1	10.5	31.6	.0	.0			
Political Science and Government	#	29	11	4	4	3	0	0	7	0	0
	%		37.9	13.8	13.8	10.3	.0	.0	24.1	.0	.0
	%	22	50.0	18.2	18.2	13.6	.0	.0			

TABLE 3.15 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Sociology	#	12	3	1	1	1	1	0	3	0	2
	%		25.0	8.3	8.3	8.3	8.3	.0	25.0	.0	16.7
	%	7	42.9	14.3	14.3	14.3	14.3	.0			
Social Sciences, Other	#	2	1	0	0	0	0	0	1	0	0
	%		50.0	.0	.0	.0	.0	.0	50.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
TOTAL	#	93	28	12	11	11	1	1	25	1	3
	%		30.1	12.9	11.8	11.8	1.1	1.1	26.9	1.1	3.2
	%	64	43.8	18.8	17.2	17.2	1.6	1.6			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

and Economics had half or more of their graduates failing to find degree-related employment.

The degree field of Anthropology was not placed in the above listing because its only reported graduate had gone on for an advanced degree. Also, the results for the fields of Criminology, Social Sciences, General and of Social Sciences, Other should be cautiously interpreted due to the small number of graduates reported for these degree fields.

When ranked according to the proportion of full-time employed graduates who found full-time employment in Pennsylvania, the Social Science degree fields ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
1.5	1	Social Sciences, Other	100.0
1.5	2	Social Sciences, General	100.0
3	7	Geography	85.7
4	22	Political Science and Government	68.2
5	6	Sociology	66.7
-	62	All Social Science Graduates	63.5
6	2	Criminology	50.0
7	19	History	47.4
8	3	Economics	33.3

While a large proportion of these graduates did find full-time employment in Pennsylvania, a substantial part of their employment was often unrelated to their area of specialization. The exceptions to this were the degree fields of Social Sciences, General; Criminology; and Social Sciences, Other where the employment obtained was for the most part degree-related but it must be noted that the number of reported graduates in each of these fields was very small.

Results for Master's Degree Graduates in the Visual and Performing Arts

Table 3.16 lists postgraduate activity distributions for master's degree graduates in the Visual and Performing Arts.

When ranked according to the proportion of Visual and Performing Arts graduates finding full-time, degree-related employment in the Civilian Labor Market, the degree fields of Table 3.16 were ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
1.5	3	Crafts	100.0
1.5	3	Design	100.0
3	9	Dramatic Arts	77.8
4	19	Music	68.4

TABLE 3.16

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR MASTER'S DEGREE GRADUATES IN THE VISUAL AND PERFORMING ARTS, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Visual and Performing Arts, General	#	15	6	1	3	5	0	0	0	0	0
	%		40.0	6.7	20.0	33.3	.0	.0	.0	.0	.0
	%	15	40.0	6.7	20.0	33.3	.0	.0			
Crafts	#	3	2	1	0	0	0	0	0	0	0
	%		66.7	33.3	.0	.0	.0	.0	.0	.0	.0
	%	3	66.7	33.3	.0	.0	.0	.0			
Design	#	3	0	3	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	3	.0	100.0	.0	.0	.0	.0			
Dramatic Arts	#	9	2	5	0	1	0	1	0	0	0
	%		22.2	55.6	.0	11.1	.0	11.1	.0	.0	.0
	%	9	22.2	55.6	.0	11.1	.0	11.1			
Fine Arts	#	16	6	4	3	0	0	2	0	0	1
	%		37.5	25.0	18.8	.0	.0	12.5	.0	.0	6.3
	%	15	40.0	26.7	20.0	.0	.0	13.3			
Music	#	23	8	5	2	2	2	0	4	0	0
	%		34.8	21.7	8.7	8.7	8.7	.0	17.4	.0	.0
	%	19	42.1	26.3	10.5	10.5	10.5	.0			
TOTAL	#	69	24	19	8	8	2	3	4	0	1
	%		34.8	27.5	11.6	11.6	2.9	4.3	5.8	.0	1.4
	%	64	37.5	29.7	12.5	12.5	3.1	4.7			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

-	64	All Visual and Performing Arts Graduates	67.2
5	15	Fine Arts	66.7
6	15	Visual and Performing Arts, General	46.7

In contrast to the findings for the associate degree and baccalaureate degree graduates, the master's degree graduates in the Visual and Peforming Arts were substantially more successful in finding degree-related employment, i.e., 67.2 percent compared with 28.6 percent and 51.1 percent for the associate degree and bachelor's degree graduates, respectively.

When ranked according to the proportion of full-time employed graduates finding full-time employment in Pennsylvania, the Visual and Performing Arts degree fields ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
1	13	Fine Arts	69.2
2	3	Crafts	66.7
3	17	Music	58.8
-	59	All Visual and Performing Arts Graduates	54.2
4	8	Dramatic Arts	25.0
5	3	Design	0.0

Not surprisingly, graduates in Design and in Dramatic Arts tended to find employment outside of Pennsylvania. This is due to the fact that the industries that utilize these graduates are, for the most part, not located in Pennsylvania.

The overall picture for the Visual and Performing Arts graduates is more favorable than was found for the same type of graduates at the baccalaureate and associate degree levels, i.e., there was more degree-related employment and less unemployment at this level. Also, there was once again a pattern of Music graduates going on for an advanced degree. This seems to reflect the high intellectual content and skill level requirements of this discipline.

SOME COMMENTS ON THE FINDINGS FOR MASTER'S DEGREE GRADUATES

Master's degree graduates, not unexpectedly, found degree-related employment more frequently than did the associate and baccalaureate degree graduates of 1982-83, but did so less frequently than the recipients of doctoral and first-professional degrees. Of the thirty major discipline areas of Table 3.0, fifteen (50%) were characterized as having seventy-five percent or more of their graduates finding degree-related, full-time employment when they entered the Civilian Labor Market.

X. RESULTS FOR DOCTORAL DEGREE GRADUATES

Table 4.0, on the pages that follow, summarizes the postgraduate activity of the doctoral degree graduates of 1982-83 in terms of the broadest (2-digit level) Classification of Instructional Programs (CIP) categories available. As before, a more detailed analysis of selected major disciplines from Table 4.0 will be made using a combination of the four-digit and six-digit levels of the CIP classification system.

The findings of Table 4.0 are given in terms of two separate percentage distributions that accompany the numerical counts for a given major discipline area. Numerical counts are shown for each of the postgraduate activity categories used in this study. The first of the two percentage distributions is simply the percentage of reported graduates in each type of activity. The second percentage distribution indicates the percentage of graduates in the Civilian Labor Market engaged in employment-related activity, i.e., it excludes those in military service, those pursuing an advanced degree, and those engaged in activity unrelated to employment were excluded.

For each of the major disciplines, the findings are given in terms of: (1) the number of graduates who found degree-related employment in Pennsylvania, (2) the number of graduates who found degree-related employment outside of Pennsylvania, (3) the number of graduates who found employment in Pennsylvania that was unrelated to their degree field, (4) the number of graduates who found employment outside of Pennsylvania that was unrelated to their degree field, (5) the number of graduates who found part-time employment, (6) the number of graduates who were unemployed and still seeking employment, (7) the number of graduates who had entered military service, (8) the number of graduates who were pursuing an advanced degree and, finally, (9) the number of graduates who were engaged in other activities, i.e., those not employed and not in graduate school but who were also not seeking employment.

Below is a comparison of selected measures on the doctoral degree graduates of 1976-77 through 1982-83. The measures were derived from this report and from previous reports in this series.

Year	Responding Graduates	Full-Time Employed	Part-Time Employed	Un-employed	Seeking Advanced Degree	Full-Time Employed In Field Prepared	Full-Time Employed In Pa.
		%	%	%	%	%	%
1977	500	90.8	3.6	4.2	1.4	90.3	57.0
1978	449	88.8	3.3	4.0	3.8	89.0	54.6
1979	339	90.9	3.2	5.0	0.9	95.8	50.3
1980	339	90.4	3.0	3.3	3.3	97.0	44.9
1981	375	91.7	3.5	3.2	1.6	95.3	41.3
1982	516	85.9	6.6	3.5	3.7	95.2	46.3
1983	277	87.0	4.7	5.8	1.8	91.7	40.7

TABLE 4.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR DOCTORAL DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
02 AGRICULTURAL SCIENCES	#	5	1	4	0	0	0	0	0	0	0
	%		20.0	80.0	.0	.0	.0	.0	.0	.0	.0
	%	5	20.0	80.0	.0	.0	.0	.0			
03 RENEWABLE NATURAL RESOURCES	#	2	0	2	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	2	.0	100.0	.0	.0	.0	.0			
04 ARCHITECTURE AND ENVIRONMENTAL DESIGN	#	2	0	2	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	2	.0	100.0	.0	.0	.0	.0			
06 BUSINESS AND MANAGEMENT	#	13	3	10	0	0	0	0	0	0	0
	%		23.1	76.9	.0	.0	.0	.0	.0	.0	.0
	%	13	23.1	76.9	.0	.0	.0	.0			
11 COMPUTOR AND INFORMATION SCIENCES	#	14	9	5	0	0	0	0	0	0	0
	%		64.3	35.7	.0	.0	.0	.0	.0	.0	.0
	%	14	64.3	35.7	.0	.0	.0	.0			
13 EDUCATION	#	46	19	17	2	1	1	6	0	0	0
	%		41.3	37.0	4.3	2.2	2.2	13.0	.0	.0	.0
	%	46	41.3	37.0	4.3	2.2	2.2	13.0			
14 ENGINEERING	#	27	8	16	0	0	1	1	0	1	0
	%		29.6	59.3	.0	.0	3.7	3.7	.0	3.7	.0
	%	26	30.8	61.5	.0	.0	3.8	3.8			

TABLE 4.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR DOCTORAL DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
15 ENGINEERING AND ENGINEERING-RELATED TECHNOLOGIES	#	3	1	2	0	0	0	0	0	0	0
	%		33.3	66.7	.0	.0	.0	.0	.0	.0	.0
	%	3	33.3	66.7	.0	.0	.0	.0			
16 FOREIGN LANGUAGES	#	0	0	0	0	0	0	0	0	0	0
	%		.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
18 HEALTH SCIENCES	#	11	4	3	2	1	0	0	1	0	0
	%		36.4	27.3	18.2	9.1	.0	.0	9.1	.0	.0
	%	10	40.0	30.0	20.0	10.0	.0	.0			
19 HOME ECONOMICS	#	7	0	3	0	2	1	1	0	0	0
	%		.0	42.9	.0	28.6	14.3	14.3	.0	.0	.0
	%	7	.0	42.9	.0	28.6	14.3	14.3			
23 LETTERS	#	16	4	10	1	0	0	1	0	0	0
	%		25.0	62.5	6.3	.0	.0	6.3	.0	.0	.0
	%	16	25.0	62.5	6.3	.0	.0	6.3			
26 LIFE SCIENCES	#	31	9	14	1	2	3	0	2	0	0
	%		29.0	45.2	3.2	6.5	9.7	.0	6.5	.0	.0
	%	29	31.0	48.3	3.4	6.9	10.3	.0			
27 MATHEMATICS	#	8	1	7	0	0	0	0	0	0	0
	%		12.5	87.5	.0	.0	.0	.0	.0	.0	.0
	%	8	12.5	87.5	.0	.0	.0	.0			

TABLE 4.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR DOCTORAL DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
30 MULTI/INTERDISCIPLINARY STUDIES	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
31 PARKS AND RECREATION	#	0	0	0	0	0	0	0	0	0	0
	%		.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
38 PHILOSOPHY AND RELIGION	#	9	2	2	1	1	1	1	1	0	0
	%		22.2	22.2	11.1	11.1	11.1	11.1	11.1	.0	.0
	%	8	25.0	25.0	12.5	12.5	12.5	12.5			
40 PHYSICAL SCIENCES	#	32	8	19	1	0	0	3	0	0	1
	%		25.0	59.4	3.1	.0	.0	9.4	.0	.0	3.1
	%	31	25.8	61.3	3.2	.0	.0	9.7			
42 PSYCHOLOGY	#	31	10	13	2	0	3	2	1	0	0
	%		32.3	41.9	6.5	.0	9.7	6.5	3.2	.0	.0
	%	30	33.3	43.3	6.7	.0	10.0	6.7			
44 PUBLIC AFFAIRS	#	3	1	2	0	0	0	0	0	0	0
	%		33.3	66.7	.0	.0	.0	.0	.0	.0	.0
	%	3	33.3	66.7	.0	.0	.0	.0			
45 SOCIAL SCIENCES	#	12	4	3	3	0	2	0	0	0	0
	%		33.3	25.0	25.0	.0	16.7	.0	.0	.0	.0
	%	12	33.3	25.0	25.0	.0	16.7	.0			

TABLE 4.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR DOCTORAL DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
50 VISUAL AND PERFORMING ARTS	#	4	1	1	0	0	1	1	0	0	0
	%		25.0	25.0	.0	.0	25.0	25.0	.0	.0	.0
	%	4	25.0	25.0	.0	.0	25.0	25.0			
TOTAL		277	85	136	13	7	13	16	5	1	1
			30.7	49.1	4.7	2.5	4.7	5.8	1.8	.4	.4
		270	31.5	50.4	4.8	2.6	4.8	5.9			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

The more negative degree-related employment findings for 1983 doctoral graduates were not unexpected in light of reports that doctoral degree recipients had been experiencing increased difficulty in their efforts to find employment during the recent economic recession. It should be noted, however, that the number of 1983 doctoral graduates for whom data was provided was about half of the number reported for the year before, though not much lower than for some of the years prior to 1982.

This reduction in numbers can be ascribed to one possible source and to one known source. First, the graduates, because of their difficulties in finding degree-related employment, might have been more reluctant then usual to respond to inquiries concerning their status. However, a study of non-respondents made several years ago did not indicate this to be a significant problem. Second, the recent decision of the University of Pittsburgh to no longer collect postgraduate activity data that is compatible with the Department of Education's survey form has undoubtedly resulted in a significant loss of data at all degree levels, especially, at the doctoral level.

Despite the rise in the rate of full-time Civilian Labor Market employment between 1982 and 1983, the general picture for doctoral degree graduates has been one of a decline in the rate of full-time employment, in the rate of degree-related employment, and in the rate of Pennsylvania based employment since 1980 when these rates were at their highest for the years 1977 through 1983. Full-time employment went from 91.7 percent to 87.0 percent between 1980 and 1983, degree-related full-time employment went from 97.0 percent to 91.7 percent, and the role of Pennsylvania based full-time employment dropped from 57.0 percent to 40.7 percent during these three years. Of these three rates, furthermore, only the rate for degree-related employment is higher in 1983 than it was in 1977.

These findings suggest the strength of the impact of the recent recession and budgetary cuts upon labor market demand for doctoral degree graduates. It is possible, however, that the impending increase in retirements due to the aging of the post-World War II entrants into the work force combined with an improving economic climate will change this pattern of decline to one of growth.

Doctoral Degree Graduates Employed Full-Time in Their Field of Preparation

Table 4.01 ranks the major disciplines of Table 4.0 according to the proportion of doctoral degree graduates who found full-time employment related to their field of preparation. In general, the disciplines at the top of Table 4.01 are those associated with the scientific and technological aspects of our society, i.e., Mathematics, Engineering Technologies, Computer and Information Sciences, Architecture and Environmental Design, Agricultural Sciences and Engineering, or with the economic aspects, e.g., Business and Management. The disciplines ranked lower down are the Life and Social Sciences, Health Sciences, and Education. The esthetic, philosophical, and nurturing disciplines in Table 4.01 are characterized by a relatively low rate of degree-related employment ranging from 42.9 percent for graduates with a degree in Home Economics to 58.3, and 63.7 percent for doctoral recipients of degrees in the Health and the Social Sciences, respectively.

TABLE 4.01

A RANK ORDERING OF DOCTORAL DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1982-83 GRADUATES FINDING FULL-TIME EMPLOYMENT RELATED TO THEIR FIELD OF PREPARATION

RANK	MAJOR DISCIPLINE	PERCENT
5	Public Affairs	100.0*
5	Multi/Interdisciplinary Studies	100.0*
5	Mathematics	100.0*
5	Engineering and Engineering-Related Technologies	100.0*
5	Computer and Information Sciences	100.0
5	Business and Management	100.0
5	Architecture and Environmental Design	100.0*
5	Renewable Natural Resources	100.0*
5	Agricultural Sciences	100.0*
10	Engineering	88.9
11	Letters	87.5
12	Physical Sciences	84.4
13	Education	78.3
14.5	Psychology	74.2
14.5	Life Sciences	74.2
16	Health Sciences	63.7
17	Social Sciences	58.3
18	Visual and Performing Arts	50.0*
19	Philosophy and Religion	44.4*
20	Home Economics	42.9*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES. PROGRAM AREAS WITH NO REPORTED GRADUATES ARE EXCLUDED.

Full-Time Degree-Related Employment of Doctoral Degree Graduates in the Civilian Labor Market

Table 4.02 ranks the major disciplines according to the proportion of graduates in the Civilian Labor Market who found full-time, degree-related employment.

Since postdoctoral education is not commonplace, the rank order of the major disciplines found in Table 4.02 should not be greatly different from that found in Table 4.01 and this is indeed the case. The only exceptions were the findings for graduates in the major discipline of Life Sciences and in the major disciplines of Psychology and of Education, where Education moved from a rank of 13 in Table 4.01 to a rank of 14 in Table 4.02, Psychology moved definitively from a tied rank of 14.5 to a rank of 15, and the major discipline of Life Sciences moved from a tied rank of 14.5 to a rank of 13. As expected, these changes were minor in nature.

Doctoral Degree Graduates Employed Full-Time in Pennsylvania

Table 4.03 ranks the major disciplines of Table 4.0 according to the percentage of graduates with full-time employment who found employment in Pennsylvania.

With the exception of the major discipline of Computer and Information Sciences, the disciplines with the highest rate of Pennsylvania employment at the doctoral level were the same as those with a low ranking on Tables 4.01 and 4.02. Pennsylvania's needs in 1983 did not seem, for the most part, to be for doctoral graduates in the Physical Sciences, or in Engineering and Engineering-Related Technologies but rather they were centered around a need for graduates in Education, in Life Sciences, in Computer Science, and in the Visual and Performing Arts.

Unemployed Doctoral Degree Graduates in the Civilian Labor Market

While one would not expect, overall, a high degree of unemployment for doctoral degree graduates who entered the Civilian Labor Market, a certain amount of unemployment was, nevertheless, reported in Table 4.04.

Not unexpectedly, graduates with a doctorate in the Visual and Performing Arts had the highest rate of unemployment, with Home Economics graduates, Education graduates, graduates in Philosophy and Religion, the Physical Sciences, Psychology, and Letters also experiencing a substantial rate of unemployment. Engineering graduates had a very small (3.8%) rate of unemployment. Only eight (40.0%) of the twenty doctoral discipline areas found in Table 4.0 had any appreciable amount of unemployment and twelve (60.0%) of the twenty disciplines reported in Table 4.0 experienced no unemployment whatsoever.

Doctoral Degree Graduates Pursuing Postdoctoral Education

It is unlikely that any appreciable amount of postdoctoral work will characterize these graduates but, as can be seen in Table 4.05, there was some

TABLE 4.02

A RANK ORDERING OF DOCTORAL DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1982-83 GRADUATES IN THE CIVILIAN LABOR MARKET WHO FOUND FULL-TIME EMPLOYMENT RELATED TO THEIR FIELD OF PREPARATION

RANK	MAJOR DISCIPLINE	PERCENT
5	Public Affairs	100.0*
5	Multi/Interdisciplinary Studies	100.0*
5	Mathematics	100.0*
5	Engineering and Engineering-Related Technologies	100.0*
5	Computer and Information Sciences	100.0
5	Business and Management	100.0
5	Architecture and Environmental Design	100.0*
5	Renewable Natural Resources	100.0*
5	Agricultural Sciences	100.0*
10	Engineering	92.3
11	Letters	87.5
12	Physical Sciences	87.1
13	Life Sciences	79.3
14	Education	78.3
15	Psychology	76.6
16	Health Sciences	70.0*
17	Social Sciences	58.3
18	Visual and Performing Arts	50.0*
19	Philosophy and Religion	50.0*
20	Home Economics	42.9*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES IN THE CIVILIAN LABOR MARKET. PROGRAM AREAS WITH NO REPORTED GRADUATES ARE EXCLUDED.

TABLE 4.03

A RANK ORDERING OF DOCTORAL DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF FULL-TIME EMPLOYED 1982-83 GRADUATES WHO FOUND EMPLOYMENT IN PENNSYLVANIA

RANK	MAJOR DISCIPLINE	PERCENT
1	Social Sciences	70.0*
2	Computer and Information Sciences	64.3
3	Health Sciences	60.0*
4	Education	53.8
5.5	Philosophy and Religion	50.0*
5.5	Visual and Performing Arts	50.0*
7	Psychology	48.0
8	Life Sciences	38.5
10.5	Engineering	33.3
10.5	Engineering and Engineering-Related Technologies	33.3*
10.5	Letters	33.3
10.5	Public Affairs	33.3*
13	Physical Sciences	32.1
14	Business and Management	23.1
15	Agricultural Sciences	20.0*
16	Mathematics	12.5*
18.5	Renewable Natural Resources	0.0*
18.5	Architecture and Environmental Design	0.0*
18.5	Home Economics	0.0*
18.5	Multi/Interdisciplinary Studies	0.0*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED FULL-TIME EMPLOYED GRADUATES. PROGRAM AREAS WITH NO REPORTED GRADUATES ARE EXCLUDED.

TABLE 4.04

A RANK ORDERING OF DOCTORAL DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF UNEMPLOYED 1982-83 GRADUATES IN THE CIVILIAN LABOR MARKET

RANK	MAJOR DISCIPLINE	PERCENT
1	Visual and Performing Arts	25.0*
2	Home Economics	14.3*
3	Education	13.0
4	Philosophy and Religion	12.5*
5	Physical Sciences	9.7
6	Psychology	6.7
7	Letters	6.3
8	Engineering	3.8
14.5	Social Sciences	0.0
14.5	Public Affairs	0.0*
14.5	Multi/Interdisciplinary Studies	0.0*
14.5	Mathematics	0.0*
14.5	Life Sciences	0.0
14.5	Health Sciences	0.0*
14.5	Engineering and Engineering-Related Technologies	0.0*
14.5	Computer and Information Sciences	0.0
14.5	Business and Management	0.0
14.5	Architecture and Environmental Design	0.0*
14.5	Renewable Natural Resources	0.0*
14.5	Agricultural Sciences	0.0*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES IN THE CIVILIAN LABOR MARKET. PROGRAM AREAS WITH NO REPORTED GRADUATES ARE EXCLUDED.

TABLE 4.05

A RANK ORDERING OF DOCTORAL DEGREE MAJOR DISCIPLINES
ACCORDING TO THE PERCENTAGE OF 1982-83 GRADUATES
PURSUING POSTDOCTORAL EDUCATION

RANK	MAJOR DISCIPLINE	PERCENT
1	Philosophy and Religion	11.1*
2	Health Sciences	9.1
3	Life Sciences	6.5
4	Psychology	3.2
8.5	Visual and Performing Arts	0.0*
8.5	Social Sciences	0.0
8.5	Public Affairs	0.0*
8.5	Physical Sciences	0.0
8.5	Multi/Interdisciplinary Studies	0.0*
8.5	Mathematics	0.0*
8.5	Letters	0.0
8.5	Home Economics	0.0*
8.5	Engineering and Engineering-Related Technologies	0.0*
8.5	Engineering	0.0
8.5	Education	0.0
8.5	Computer and Information Sciences	0.0
8.5	Business and Management	0.0
8.5	Architecture and Environmental Design	0.0*
8.5	Renewable Natural Resources	0.0*
8.5	Agricultural Sciences	0.0*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES. PROGRAM AREAS WITH NO REPORTED GRADUATES ARE EXCLUDED.

postdoctoral work observed for graduates of a few of the major disciplines of Table 4.0, i.e., graduates in Philosophy and Religion, in the Health Sciences, in the Life Sciences, and in Psychology.

DETAILED ANALYSES OF SELECTED DOCTORAL DEGREE DISCIPLINES

As with the lower level degrees, many of the two-digit level categories of Table 4.0 are too generalized for the purposes of the users of this report. A selection from the major discipline areas of Table 4.0 has therefore been made and findings, at the more detailed four-digit and, in some instances, the six-digit level of the CIP code are presented below.

Results for Doctoral Degree Graduates in Business and Management

Table 4.06 breaks out, at a more detailed level, the major discipline of Business and Management found in Table 4.0. The most striking feature of Table 4.06 is the fact that all of the graduates in Table 4.06 found degree-related employment regardless of the degree field under analysis. The only variation lay in whether the reported employment was in Pennsylvania, or outside of Pennsylvania.

Only one of the disciplines in Table 4.06 had any reported Pennsylvania employment. This was the degree field of Business Administration and Management where 60 percent of its graduates had found full-time, degree-related work in Pennsylvania. All of the other disciplines of Table 4.06 had rates of 100 percent degree-related employment with 100 percent of that employment outside of Pennsylvania. Obviously, at the doctoral level, Pennsylvania's employment needs are not high with regard to the more technical and scientific business and management disciplines of Business Economics, Management Science and Marketing Management and Research.

Results for Doctoral Degree Graduates in Education

Table 4.07 breaks out the Education category of Table 4.0 in terms of specific degree fields within that discipline. Although a variety of analyses of Table 4.07 can be made, only two will be made here, i.e., an analysis of full-time, degree-related Civilian Labor Market employment and an analysis of the rate of full-time employment in Pennsylvania for graduates who obtained full-time employment in 1963.

In terms of full-time, degree-related, Civilian Labor Market rates of employment, the rankings of the doctoral degree fields of Table 4.07 are as follows:

TABLE 4.06

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR DOCTORAL DEGREE GRADUATES IN BUSINESS, MARKETING, AND MANAGEMENT, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Banking and Finance	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
Business Administration and Management	#	5	3	2	0	0	0	0	0	0	0
	%		60.0	40.0	.0	.0	.0	.0	.0	.0	.0
	%	5	60.0	40.0	.0	.0	.0	.0			
Business Economics	#	3	0	3	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	3	.0	100.0	.0	.0	.0	.0			
Management Science	#	2	0	2	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	2	.0	100.0	.0	.0	.0	.0			
Marketing Management and Research	#	2	0	2	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	2	.0	100.0	.0	.0	.0	.0			-
TOTAL	#	13	3	10	0	0	0	0	0	0	0
	%		23.1	76.9	.0	.0	.0	.0	.0	.0	.0
	%	13	23.1	76.9	.0	.0	.0	.0			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

TABLE 4.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR DOCTORAL DEGREE GRADUATES IN EDUCATION, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED: IN PA	EMPLOYED IN FIELD PREPARED: OUTSIDE PA	EMPLOYED OTHER FIELD: IN PA	EMPLOYED OTHER FIELD: OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Curriculum and Instruction	#	9	4	2	0	0	0	3	0	0	0
	%		44.4	22.2	.0	.0	.0	33.3	.0	.0	.0
	%	9	44.4	22.2	.0	.0	.0	33.3			
Education Administration	#	4	3	0	0	0	0	1	0	0	0
	%		75.0	.0	.0	.0	.0	25.0	.0	.0	.0
	%	4	75.0	.0	.0	.0	.0	25.0			
Evaluation and Research	#	2	1	0	1	0	0	0	0	0	0
	%		50.0	.0	50.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	.0	50.0	.0	.0	.0			
School Psychology	#	6	3	2	0	0	1	0	0	0	0
	%		50.0	33.3	.0	.0	16.7	.0	.0	.0	.0
	%	6	50.0	33.3	.0	.0	16.7	.0			
Special Education	#	2	0	2	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	2	.0	100.0	.0	.0	.0	.0			
Student Counseling and Personnel Services	#	4	2	2	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	4	50.0	50.0	.0	.0	.0	.0			
Teacher Education, Specific Subject Areas	#	19	6	9	1	1	0	2	0	0	0
	%		31.5	47.4	5.3	5.3	.0	10.5	.0	.0	.0
	%	19	31.5	47.4	5.3	5.3	.0	10.5			

TABLE 4.07 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Agricultural Education	#	4	2	2	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	4	50.0	50.0	.0	.0	.0	.0			
Art Education	#	3	0	3	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	3	.0	100.0	.0	.0	.0	.0			
Health Education	#	3	1	0	0	0	0	2	0	0	0
	%		33.3	.0	.0	.0	.0	66.7	.0	.0	.0
	%	3	33.3	.0	.0	.0	.0	66.7			
Home Economics Education	#	3	1	2	0	0	0	0	0	0	
	%		33.3	66.7	.0	.0	.0	.0	.0	.0	
	%	3	33.3	66.7	.0	.0	.0				
Physical Education	#	3	0	2	0	1	0	0	0	0	0
	%		.0	66.7	.0	33.3	.0	.0	.0	.0	.0
	%	3	.0	66.7	.0	33.3	.0	.0			
Trade and Industrial Education	#	3	2	0	1	0	0	0	0	0	0
	%		66.7	.0	33.3	.0	.0	.0	.0	.0	.0
	%	3	66.7	.0	33.3	.0	.0	.0			
TOTAL	#	46	19	17	2	1	1	6	0	0	0
	%		41.3	37.0	4.3	2.2	2.2	13.0	.0	.0	.0
	%	46	41.3	37.0	4.3	2.2	2.2	13.0			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

RANK	N	DEGREE FIELD	PERCENT
2	2	Special Education	100.0
2	3	Art Education	100.0
2	3	Home Economics Education	100.0
4	6	School Psychology	83.3
-	46	All Education Graduates	78.3
5	4	Educational Administration	75.0
6.5	3	Physical Education	66.7
6.5	3	Trade and Industrial Education	66.7
8	9	Curriculum and Instruction	66.6
10	2	Evaluation and Research	50.0
10	4	Student Counseling and Personnel Services	50.0
10	4	Agricultural Education	50.0
12	3	Health Education	33.3

This listing suggests that there was a high level of demand for doctoral degree holders in the fields of Special Education, Art Education, Home Economics Education, School Psychology, and in Educational Adminstration and only a moderate demand for doctoral recipients in the fields of Physical Education, Trade and Industrial Education, and Curriculum and Instruction. An unsatisfactory level of demand apparently characterized the specialities of Evaluation and Research and Student Counseling and Personnel Services as well as the teaching fields of Agricultural Education and of Health Education.

When the doctoral degree fields of Table 4.07 were ranked in terms of the proportion of full-time employed graduates who obtained full-time employment in Pennsylvania, the degree fields were ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
2.5	2	Evaluation and Research	100.0
2.5	3	Trade and Industrial Education	100.0
2.5	3	Education Administration	100.0
2.5	1	Health Education	100.0
5	6	Curriculum and Instruction	66.7
6	5	School Psychology	60.0
-	39	All Education Graduates	53.8
7.5	4	Student Counseling and Personnel Services	50.0
7.5	4	Agricultural Education	50.0
9	3	Home Economics Education	33.3
11	2	Special Education	0.0
11	3	Art Education	0.0
11	3	Physical Education	0.0

Although all of the graduates in the degree fields of Evaluation and Research, of Health Education, and of Trade and Industrial Education found some kind of employment in Pennsylvania, it should be noted that 66.7 percent of the Health Education graduates, 50.0 percent of the Evaluation and Research graduates, and 33.3 percent of the Trade and Industrial Education graduates had not been

able to find degree-related employment when they entered the Civilian Labor Market. It should also be noted that although 100.0 percent of the full-time employed graduates in Educational Administration were employed in Pennsylvania, 75 percent of those who had entered the Civilian Labor Market had found degree-related employment with another 25 percent in the "Unemployed" category.

Results for Doctoral Degree Graduates in Engineering

Table 4.08 summarizes the postgraduate activities of doctoral degree graduates in specific degree field specialties subsumed under the major discipline of Engineering in Table 4.0.

Inspection of Table 4.08 quickly reveals that, with the exception of graduates in the degree fields of Environmental Health Engineering and of Materials Engineering, graduates in Engineering, at the doctoral level, have universally found degree-related employment. The only reported Environmental Health graduate was reported as being employed part-time and one of the five Materials Engineering graduates was reported as being unemployed in the Fall of 1983.

When the degree fields of Table 4.08 were ranked according to the proportion of full-time employed graduates who were employed in Pennsylvania, these degree fields were ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
1	1	Agricultural Engineering	100.0
3	2	Ceramic Engineering	50.0
3	2	Electrical, Electronics and Communications Engineering	50.0
3	2	Mining and Mineral Engineering	50.0
5	4	Materials Engineering	40.0
-	24	All Engineering Graduates	30.8
6	7	Metallurgical Engineering	28.6
7	5	Chemical Engineering	0.0
8	1	Industrial Health Engineering	0.0
-	0	Engineering Mechanics	NA
-	0	Environmental Health Engineering	NA

This ranking strongly suggests that doctoral graduates in Engineering are, not unexpectedly, seeking employment in a highly competitive national or even international job market with Pennsylvania typically attracting fifty percent or fewer of these graduates.

Results for Doctoral Graduates in the Physical Sciences

Table 4.09 summarizes the postgraduate activities reported for doctoral degree graduates with degrees in the Physical Science. A visual inspection of Table 4.09 quickly reveals that, as in the case of Engineering graduates, there is a strong pattern of high degree-related employment. This is true for all of

TABLE 4.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR DOCTORAL GRADUATES IN ENGINEERING, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Agricultural Engineering	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
Ceramic Engineering	#	2	1	1	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0			
Chemical Engineering	#	5	0	5	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	5	.0	100.0	.0	.0	.0	.0			
Electrical, Electronics, and Communications Engineering	#	2	1	1	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0	.0	.0	.0
Engineering Mechanics	#	1	0	0	0	0	0	0	0	1	0
	%		.0	.0	.0	.0	.0	.0	.0	100.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
Environmental Health Engineering	#	1	0	0	0	0	1	0	0	0	0
	%		.0	.0	.0	.0	100.0	.0	.0	.0	.0
	%	1	.0	.0	.0	.0	100.0	.0			
Industrial Engineering	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0	.0	.0	.0

TABLE 4.08 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Materials Engineering	#	5	2	2	0	0	0	1	0	0	0
	%		40.0	40.0	.0	.0	.0	20.0	.0	.0	.0
	%	5	40.0	40.0	.0	.0	.0	20.0			
Metallurgical Engineering	#	7	2	5	0	0	0	0	0	0	0
	%		28.6	71.4	.0	.0	.0	.0	.0	.0	.0
	%	7	28.6	71.4	.0	.0	.0	.0			
Mining and Mineral Engineering	#	2	1	1	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0			
TOTAL	#	27	8	16	0	0	1	1	0	1	0
	%		29.6	59.3	.0	.0	3.7	3.7	.0	3.7	.0
	%	26	30.8	61.5	.0	.0	3.8	3.8			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

TABLE 4.09

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR DOCTORAL GRADUATES IN THE PHYSICAL SCIENCES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Astronomy	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
Atmospheric Sciences and Meteorology	#	2	1	1	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0			
Chemistry	#	17	5	8	1	0	0	2	0	0	1
	%		29.4	47.1	5.9	.0	.0	11.8	.0	.0	5.9
	%	16	31.3	50.0	6.3	.0	.0	12.5			
Geological Sciences	#	3	0	3	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	3	.0	100.0	.0	.0	.0	.0			
Physics	#	6	1	5	0	0	0	0	0	0	0
	%		16.7	83.3	.0	.0	.0	.0	.0	.0	.0
	%	6	16.7	83.3	.0	.0	.0	.0			
Physical Sciences, Other	#	3	0	2	0	0	0	1	0	0	0
	%		.0	66.7	.0	.0	.0	33.3	.0	.0	.0
	%	3	.0	66.7	.0	.0	.0	33.3			
TOTAL	#	32	8	19	1	0	0	3	0	0	1
	%		25.0	59.4	3.1	.0	.0	9.4	.0	.0	3.1
	%	31	25.8	61.3	3.2	.0	.0	9.7			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

the sciences listed. One exception to this was the general category of Physical Sciences, Other, which had a Civilian Labor Market full-time employment rate of 66.7 percent. The other exception to the pattern of 100 percent degree-related employment was that of the field of Chemistry where 81.3 percent of the graduates found degree-related, full-time employment and 6.3 percent found unrelated full-time employment. In addition, 12.5 percent of the graduates in Chemistry were reported as unemployed.

When ranked according to the proportion of full-time employed doctoral graduates finding employment in Pennsylvania, the Physical Sciences were rank ordered as follows:

RANK	N	DEGREE FIELD	PERCENT
1	1	Astronomy	100.0
2	2	Atmospheric Sciences and Meteorology	50.0
3	14	Chemistry	42.9
-	28	All Physical Science Graduates	32.1
4	6	Physics	16.7
5.5	3	Geological Sciences	0.0
5.5	2	Physical Sciences, Other	0.0

In evaluating these rankings, it should be noted that there were only two reported graduates in Atmospheric Sciences and Meteorology and only one graduate in Astronomy. It is entirely possible that if more graduates had been reported, the rank ordering of these two degree fields might have been different. In general, however, it is apparent that Physical Science graduates, at the doctoral level, are typically competing in a national or even international job market with a resulting high rate of degree-related Civilian Labor Market employment (87.1%) and a relatively low (32.1%) degree of full-time Pennsylvania based employment.

Results for Doctoral Degree Graduates in Psychology

Table 4.10 summarizes in greater detail the postgraduate activities of doctoral degree graduates in the major discipline of Psychology. Only two specific degree fields were reported at this level of analysis: General Psychology, and Clinical Psychology.

Visual inspection of Table 4.10 quickly reveals that Pennsylvania's 1983 doctoral graduates in Clinical Psychology were substantially more likely to find degree-related, full-time employment in the Civilian Labor Market than were graduates with a more generalized degree. Eighty percent of the graduates in Clinical Psychology had degree-related, full-time employment by Fall 1983 compared with a figure of seventy percent for doctoral degree graduates in General Psychology. The doctoral graduates in General Psychology also had an unemployment rate twice as high as that for the holders of a doctorate in Clinical Psychology (10 percent versus 5 percent) and a rate of part-time employment that was four times that for graduates in Clinical Psychology (20 percent versus 5 percent). About 4.8 percent of the doctoral graduates in

TABLE 4.10

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR DOCTORAL GRADUATES IN PSYCHOLOGY, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED: IN PA	EMPLOYED IN FIELD PREPARED: OUTSIDE PA	EMPLOYED IN OTHER FIELD: IN PA	EMPLOYED IN OTHER FIELD: OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Psychology, General	#	10	1	6	0	0	2	1	0	0	0
	%		10.0	60.0	.0	.0	20.0	10.0	.0	.0	.0
	%	10	10.0	60.0	.0	.0	20.0	10.0			
Clinical Psychology	#	21	9	7	2	0	1	1	1	0	0
	%		42.9	33.3	9.5	.0	4.8	4.8	4.8	.0	.0
	%	20	45.0	35.0	10.0	.0	5.0	5.0			
TOTAL	#	31	10	13	2	0	3	2	1	0	0
	%		32.3	41.9	6.5	.0	9.7	6.5	3.2	.0	.0
	%	30	33.3	43.3	6.7	.0	10.0	6.7			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

Clinical Psychology went on for some form of postdoctoral education in contrast to graduates in the field of General Psychology who did not do so.

It would seem, based upon the data in Table 4.10, that a doctorate in Psychology is still a reasonably viable choice occupationally, particularly in the area of Clinical Psychology.

Results for Doctoral Degree Graduates in the Social Sciences

Table 4.11 summarizes in greater detail the postgraduate activities of doctoral degree recipients in the major discipline area referred to in Table 4.0 as the Social Sciences. Visual examination of Table 4.11 suggests that degree fields under the rubric of the Social Sciences can be divided into two distinctly different patterns of postgraduate activity.

The first consists of the degree fields of Anthropology and of Geography where there was a distinct trend toward part-time employment, however, the small numbers involved make this assumption tentative, at best.

The second group consists of the degree fields of History and of Political Science and Government. Here the pattern seems to be one of degree-related, full-time employment with graduates in History also having some full-time employment that is unrelated to their degree (28.6 percent).

When ranked according to the proportion finding full-time, degree-related employment in the Civilian Labor Market, the doctoral degree fields in the Social Sciences ranked as follows:

RANK	N	DEGREE FIELD	PERCENT
1	1	Political Science and Government	100.0
2	7	History	71.5
-	12	All Social Science Graduates	58.3
3	2	Anthropology	50.0
4.5	1	Social Sciences, Other	0.0
4.5	1	Geography	0.0

With regard to the proportion of full-time employed graduates finding full-time employment in Pennsylvania, 57.1 percent of the graduates in the degree field of History had such employment. The other degree fields of Table 4.11 had 100 percent full-time Pennsylvania employment but, in each case, this figure represented only one graduate. No full-time degree-related employment results could be reported for the only graduate with a degree in Geography, since that graduate had only a part-time position.

TABLE 4.11

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR DOCTORAL DEGREE GRADUATES IN THE SOCIAL SCIENCES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
Anthropology	#	2	1	0	0	0	1	0	0	0	0
	%		50.0	.0	.0	.0	50.0	.0	.0	.0	.0
	%	2	50.0	.0	.0	.0	50.0	.0			
Geography	#	1	0	0	0	0	1	0	0	0	0
	%		.0	.0	.0	.0	100.0	.0	.0	.0	.0
	%	1	.0	.0	.0	.0	100.0	.0			
History	#	7	2	3	2	0	0	0	0	0	0
	%		28.6	42.9	28.6	.0	.0	.0	.0	.0	.0
	%	7	28.6	42.9	28.6	.0	.0	.0			
Political Science and Government	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
Social Sciences, Other	#	1	0	0	1	0	0	0	0	0	0
	%		.0	.0	100.0	.0	.0	.0	.0	.0	.0
	%	1	.0	.0	100.0	.0	.0	.0			
TOTAL	#	12	4	3	3	0	2	0	0	0	0
	%		33.3	25.0	25.0	.0	16.7	.0	.0	.0	.0
	%	12	33.3	25.0	25.0	.0	16.7	.0			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

A COMMENT ON THE FINDINGS FOR DOCTORAL DEGREE GRADUATES

The doctoral degree graduate continues to experience a high level of degree-related employment although not as high as for the years 1978-79, 1979-80, 1980-81 and 1981-82 when the proportion of full-time employed graduates with degree-related employment was about 96, 97, and 95 percent, respectively compared with a figure of 92 percent for 1983. The general trend has been downward in recent years due to the recent economic recession on top of a relatively high level of production relative to current demand. The anticipated increase in departures from the labor force (death, retirements) due to the aging of the post war (World War II) generation of professionals should, in future years, increase the level of demand relative to supply.

XI. RESULTS FOR FIRST-PROFESSIONAL DEGREE GRADUATES

Table 5.0, on the pages that follow, summarizes the postgraduate activity of the first-professional graduates of 1982-83 in terms of the broadest (2-digit level) Classification of Instructional Programs (CIP) categories available.

The findings of Table 5.0 are given in terms of two separate percentage distributions that accompany the numerical counts for a given major discipline area. Numerical counts are shown for each of the postgraduate activity categories used in this study. The first of the two percentage distributions is simply the percentage of reported graduates in each type of activity. The second percentage distribution indicates the percentage of graduates in the Civilian Labor Market engaged in employment-related activity, i.e., it excludes those in military service, those pursuing an advanced degree, and those engaged in activity unrelated to employment were excluded.

For each of the major disciplines, the findings are given in terms of: (1) the number of graduates who found degree-related employment in Pennsylvania, (2) the number of graduates who found degree-related employment outside of Pennsylvania, (3) the number of graduates who found employment in Pennsylvania that was unrelated to their degree field, (4) the number of graduates who found employment outside of Pennsylvania that was unrelated to their degree field, (5) the number of graduates who found part-time employment, (6) the number of graduates who were unemployed and still seeking employment, (7) the number of graduates who had entered military service, (8) the number of graduates who were pursuing an advanced degree and, finally, (9) the number of graduates who were engaged in other activities, i.e., those not employed and not in graduate school but who were also not seeking employment.

Below is a comparison of selected measures on the first-professional graduates of 1976-77 through 1982-83. The measures were derived from this report and from previous reports in this series.

Year	Responding Graduates	Full-Time Employed	Part-Time Employed	Un-employed	Seeking Advanced Degree	Full-Time Employed In Field Prepared	Full-Time Employed In Pa.
		%	%	%	%	%	%
1977	2,645	91.9	0.5	2.2	5.4	96.4	57.1
1978	2,567	94.8	0.7	1.8	2.6	98.5	57.3
1979	2,290	95.1	1.3	1.5	2.1	98.8	60.0
1980	2,272	94.9	0.2	2.2	2.6	98.7	57.3
1981	2,184	96.1	0.3	2.1	1.5	99.5	54.9
1982	2,163	96.1	0.7	1.7	3.8	99.3	61.5
1983	1,871	81.1	1.4	1.7	8.6	95.2	57.4

In 1983, the Pennsylvania College of Podiatric Medicine reported, for the first time, that nearly all of its graduates were pursuing an advanced degree, i.e., an internship, rather than reporting them as engaged in degree-related, full-time employment. The resulting reduction in the full-time employment

TABLE 5.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY PROGRAM CATEGORY FOR 1ST PROFESSIONAL DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
1804 DENTISTRY	#	370	141	71	0	1	6	4	107	35	5
	%		38.1	19.2	.0	.3	1.6	1.1	28.9	9.5	1.4
	%	223	63.2	31.8	.0	.4	2.7	1.8			
1810 MEDICINE	#	971	514	436	1	0	0	0	3	17	0
	%		52.9	44.9	.1	.0	.0	.0	.3	1.8	.0
	%	951	54.0	45.8	.1	.0	.0	.0			
1812 OPTOMETRY	#	92	33	50	0	3	4	0	2	0	0
	%		35.9	54.3	.0	3.3	4.3	.0	2.2	.0	.0
	%	90	36.7	55.6	.0	3.3	4.4	.0			
1813 OSTEOPATHIC MEDICINE	#	206	128	65	0	0	0	0	0	13	0
	%		62.1	31.6	.0	.0	.0	.0	.0	6.3	.0
	%	193	66.3	33.7	.0	.0	.0	.0			
1814 PHARMACY	#	7	4	3	0	0	0	0	0	0	0
	%		57.1	42.9	.0	.0	.0	.0	.0	.0	.0
	%	7	57.1	42.9	.0	.0	.0	.0			
1815 PODIATRY	#	114	2	2	0	0	0	0	110	0	0
	%		1.8	1.8	.0	.0	.0	.0	96.5	.0	.0
	%	4	50.0	50.0	.0	.0	.0	.0			
1824 VETERINARY MEDICINE	#	111	47	60	0	0	0	0	4	0	0
	%		42.3	54.1	.0	.0	.0	.0	3.6	.0	.0
	%	107	43.9	56.1	.0	.0	.0	.0			

TABLE 5.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY PROGRAM CATEGORY FOR 1ST PROFESSIONAL DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
2201 LAW	#	938	423	300	81	28	29	45	16	7	9
	%		45.1	32.0	8.6	3.0	3.1	4.8	1.7	.7	1.0
	%	906	46.7	33.1	8.9	3.1	3.2	5.0			
TOTAL		2,809	1,292	987	82	32	39	49	242	72	14
			46.0	35.1	2.9	1.1	1.4	1.7	8.6	2.6	.5
		2,481	52.1	39.8	3.3	1.3	1.6	2.0			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

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figures may not, however, be completely due to that fact since the full-time employed figure for graduates in Podiatry, if corrected, would only rise from 81.1 percent to 85.0 percent and the percentage of full-time employed who are in degree-related employment would rise from 95.2 percent to 95.4 percent.

The unaccounted for reductions in overall degree-related employment seems to be due to a marked reduction in the incidence of degree-related employment outside of Pennsylvania for Dentistry graduates from 29.9 percent to 19.2 percent, and a reduction of degree-related Law graduate employment from 88.0 percent to 77.1 percent. In addition, the graduates of Table 5.0 experienced an overall increase in military service from none in 1982 to seventy-two graduates in 1983. It is possible that, in prior years, the dentists, physicians, and osteopathic physicians who entered the military were reported as having degree-related, out-of-state employment and are now being reported simply as having entered military service. If true, this would also have helped to reduce the 1983 degree-related figure.

The findings of a decline in degree-related employment for Law and Dentistry graduates are, however, in agreement with a recently reported surplus of law graduates and also, with suggestions of a surplus of dentistry graduates.

Of the eight degree fields in Table 5.0, only three (Dentistry, Optometry, and Law) have any reported incidence of either unemployment or part-time employment. Also only one of the medical school graduates was reported as having obtained full-time employment that was not degree-related.

First-Professional Degree Graduates Employed Full-Time in Their Field of Preparation

If we ignore the artificially low ranking for Podiatry, the data in Table 5.01 indicate that virtually all of the graduates in Pharmacy, Medicine and, to a lesser degree, Veterinary Medicine entered directly into degree-related, full-time employment. This would be true also of graduates in Osteopathic Medicine if we consider military service to be degree-related, as it almost certainly is. Graduates in Optometry, Law and Dentistry were, in contrast, substantially less likely to find degree-related employment than first-professionals in the other degree fields.

Full-Time Degree-Related Employment of First-Professional Degree Graduates in the Civilian Labor Market

When the definition of degree-related employment is narrowed to consider only those graduates who are either employed or are seeking employment in the Civilian Labor Market, Table 5.02 gives a somewhat different picture. This table reflects what happened to those first-professional graduates who sought employment rather than go on for an advanced degree or engage in activities unrelated to employment or the seeking of employment.

Viewed in this context, it is clear that, with the possible exceptions of Dentistry and Optometry, and the definite exception of graduates in Law, first-professional graduates who enter the Civilian Labor Market almost invariably find full-time, degree-related positions.

TABLE 5.01

A RANK ORDERING OF FIRST-PROFESSIONAL MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1982-83 GRADUATES FINDING FULL-TIME EMPLOYMENT RELATED TO THEIR FIELD OF PREPARATION

RANK	MAJOR DISCIPLINE	PERCENT
1	Pharmacy	100.0*
2	Medicine	97.8
3	Veterinary Medicine	96.4
4	Osteopathic Medicine	93.7
5	Optometry	90.2
6	Law	77.1
7	Dentistry	57.3
8	Podiatry[1]	3.6

[1]The Podiatry graduates were virtually all placed in the "pursuing advanced degree" category due to their internship requirements. The data indicate that if internship were seen as field-related employment then the percentage figure would be 100 percent rather than 3.6 percent.

*THIS MAJOR DISCIPLINE HAD TEN OR FEWER REPORTED GRADUATES (N-7).

TABLE 5.02

A RANK ORDERING OF FIRST-PROFESSIONAL MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1982-83 GRADUATES IN THE CIVILIAN LABOR MARKET WHO FOUND FULL-TIME EMPLOYMENT RELATED TO THEIR FIELD OF PREPARATION

RANK	MAJOR DISCIPLINE	PERCENT
2.5	Veterinary Medicine	100.0
2.5	Podiatry	100.0*
2.5	Pharmacy	100.0*
2.5	Osteopathic Medicine	100.0
5	Medicine	99.8
6	Dentistry	95.0
7	Optometry	92.3
8	Law	79.8

*THESE MAJOR DISCIPLINES HAD LESS THAN TEN REPORTED GRADUATES IN THE CIVILIAN LABOR MARKET.

First-Professional Degree Graduates Employed Full-Time in Pennsylvania

Some concern is often expressed about what proportion of Pennsylvania's full-time employed, first-professional graduates remain in Pennsylvania to practice their profession. While this study can not answer this question over the longer periods of internship and specialized training that characterize these professions, it can give some idea of where they have found their initial employment (or internship, if reported as degree-related employment). Table 5.03 therefore ranks the first-professional degree fields of Table 5.0 according to the percentage of full-time Pennsylvania employment of first-professional graduates.

TABLE 5.03

A RANK ORDERING OF FIRST-PROFESSIONAL MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF FULL-TIME EMPLOYED 1982-83 GRADUATES WHO FOUND EMPLOYMENT IN PENNSYLVANIA

RANK	DEGREE PROGRAM AREA	PERCENT
1	Optometry	80.5
2	Osteopathic Medicine	66.3
3	Dentistry	66.2
4	Law	60.6
5	Pharmacy	57.1*
6	Medicine	54.2
7	Podiatry	50.0*
8	Veterinary Medicine	43.9

*These degree program areas had less than ten reported full-time employed graduates.

This table (Table 5.03) indicates that graduates in Optometry, Osteopathic Medicine, Dentistry, and Law had a definite tendency to find Pennsylvania based employment while graduates in Pharmacy, Medicine, Podiatry and in particular, Veterinary Medicine tended to be characterized by a substantial amount of employment outside of Pennsylvania. These findings possibly reflect the realities of supply and demand relative to Pennsylvania's needs.

Unemployed First-Professional Degree Graduates in the Civilian Labor Market

As might be expected, there was virtually no reported unemployment at this degree level (Table 5.04). Only graduates in Law (5.0 percent) and Dentistry (1.8 percent) experienced any Civilian Labor Market unemployment.

TABLE 5.04

A RANK ORDERING OF FIRST-PROFESSIONAL MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF UNEMPLOYED 1982-83 GRADUATES IN THE CIVILIAN LABOR MARKET

RANK	MAJOR DISCIPLINE	PERCENT
1	Law	5.0
2	Dentistry	1.8
5.5	Veterinary Medicine	0.0
5.5	Podiatry	0.0*
5.5	Pharmacy	0.0*
5.5	Osteopathic Medicine	0.0
5.5	Optometry	0.0
5.5	Medicine	0.0

*THESE MAJOR DISCIPLINES HAD LESS THAN TEN REPORTED GRADUATES IN THE CIVILIAN LABOR MARKET.

TABLE 5.05

A RANK ORDERING OF FIRST-PROFESSIONAL MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1982-83 GRADUATES PURSUING AN ADVANCED DEGREE

RANK	MAJOR DISCIPLINE	PERCENT
1	Podiatry[1]	96.5
2	Dentistry	28.9
3	Veterinary Medicine	3.6
4	Optometry	2.2
5	Law	1.7
6	Medicine	0.3
7.5	Pharmacy	0.0*
7.5	Osteopathic Medicine	0.0

[1]These first-professionals have been placed in the category of Pursuing an Advanced Degree because of their moving on to internship positions. In past years, they were reported as full-time employed in a degree-related position.

*THIS MAJOR DISCIPLINE HAD LESS THAN TEN REPORTED GRADUATES.

First-Professional Degree Graduates Pursuing an Advanced Degree

Although, the first-professional degree is ordinarily considered to be a terminal degree, many of these graduates were reported as pursuing some form of graduate training (Table 5.05). This is particularly true for graduates in Dentistry who may immediately move on to working toward a speciality degree. Graduates interning in Podiatry, however, were reported as pursuing an advanced degree although, in past years, the internship period was reported by the responding first-professional institution as degree-related employment. Also, in Table 5.05, some postdoctoral work has been reported for all but two of the degree fields of Table 5.0. Only the graduates in the fields of Medicine and Pharmacy were not reported as being engaged in a postdoctoral education program. Presumably, this would also have been true for Podiatry graduates, if their internships had been classified as full-time, degree-related employment.

SOME COMMENTS ON THE FINDINGS FOR FIRST-PROFESSIONAL DEGREE GRADUATES

The overall picture for first-professional graduates is still one of a high level of degree-related employment with substantial proportions finding employment in Pennsylvania. There is also, however, evidence for a possible softening of employment demand for graduates in the fields of Law and Dentistry.

XII. POSTGRADUATE ACTIVITY TRENDS

This section of the report attempts to summarize the changes that have occurred in selected postgraduate activity measures over time. It will deal first with the question of what changes have there been for graduates at each degree level and then attempt to indicate what changes have taken place with respect to specific major higher education disciplines at each degree level.

Postgraduate Activity Trends by Type of Degree

Figure 1, on the following page, is an attempt to summarize time trends, at each degree level, with regard to the proportion of full-time employed graduates finding degree-related employment upon graduation.

As can be seen in Figure 1, a majority of the graduates obtained degree-related employment when they succeeded in finding a full-time position. This occurred at every degree level. The rates for bachelor's degree graduates and for first-professional degree graduates have risen and held reasonably steady while, in contrast, there has been a pattern of decline in degree-related employment for the other degrees.

Figure 2, on the other hand, addresses the question of change in the incidence of degree-related employment among those who had entered the Civilian Labor Market in search of employment. As can be seen in Figure 2, there was an increase in this measure at all degree levels up until 1979 or 1980 when a pattern of decline began, largely as a result of the recent recession. These declines are most noticeable in the case of the associate degree graduates, the baccalaureate degree graduates, and the master's degree graduates.

Figure 3 addresses the question of changes over time in the rate of full-time employment in Pennsylvania obtained by those who had full-time employment in or out of the State.

The general picture in Figure 3 is one of an overall decline in the rate of Pennsylvania based employment with the exception of the rates for Pennsylvania's first-professional graduates. The decline is particularly evident in the case of the baccalaureate and master's degree graduates.

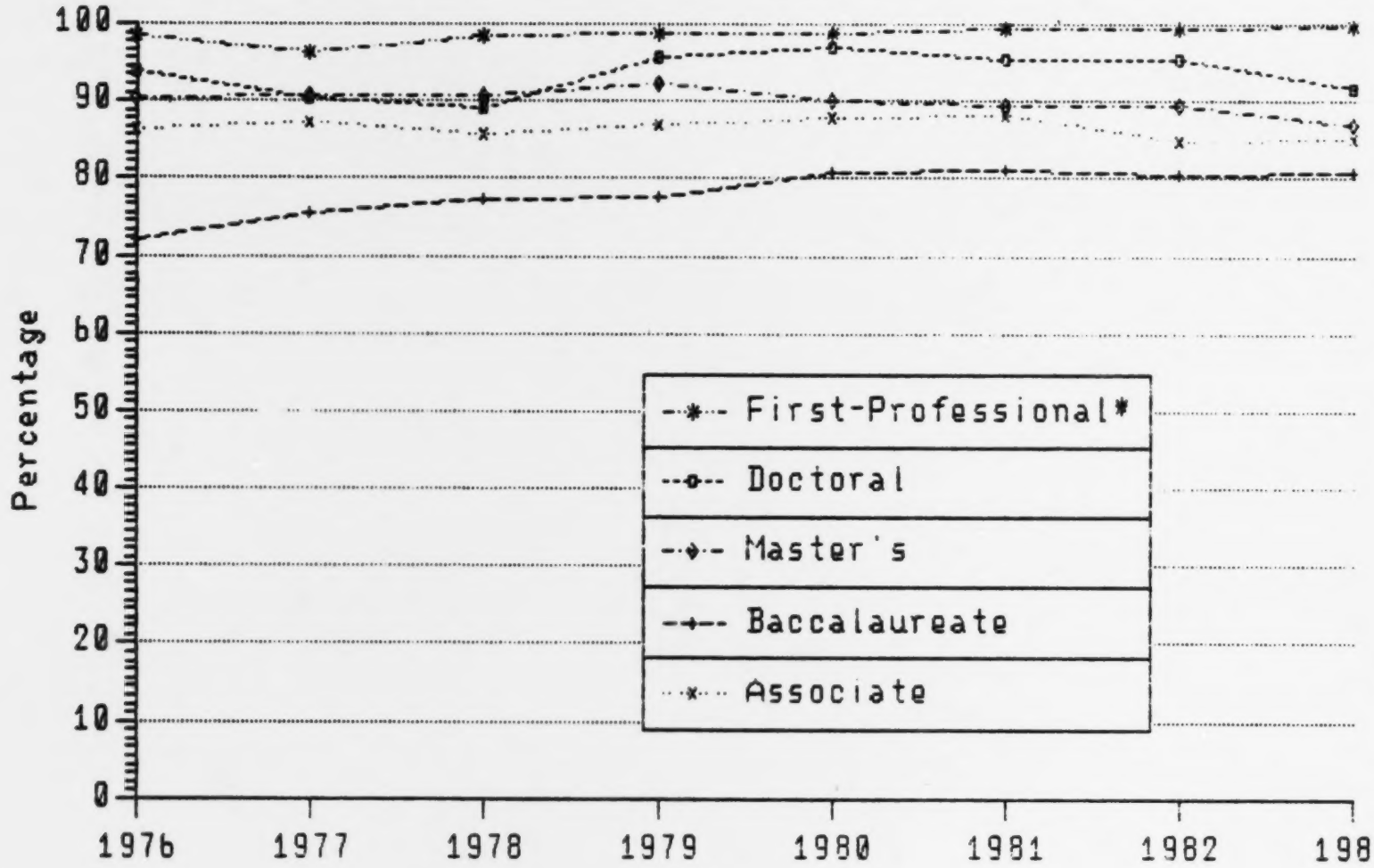
Figure 4 summarizes, for each degree level, changes in the proportion of graduates who went on to seek an advanced degree rather than enter the labor market. Here we see a strong decline in the case of associate degree graduates and a pattern of increase for the master's degree graduates. Presumably, this is due to the increasing emphasis upon vocationally oriented curricula at the associate degree level and a shift to the doctorate (rather than the master's degree) as the terminal degree of choice.

Postgraduate Activity Trends by Degree Program

Since this report is based upon new six-digit Classification of Instructional Programs (CIP) codes rather than the old four-digit HEGIS codes used for prior reports in this series, it has not been feasible to show time trends in the

FIGURE 1

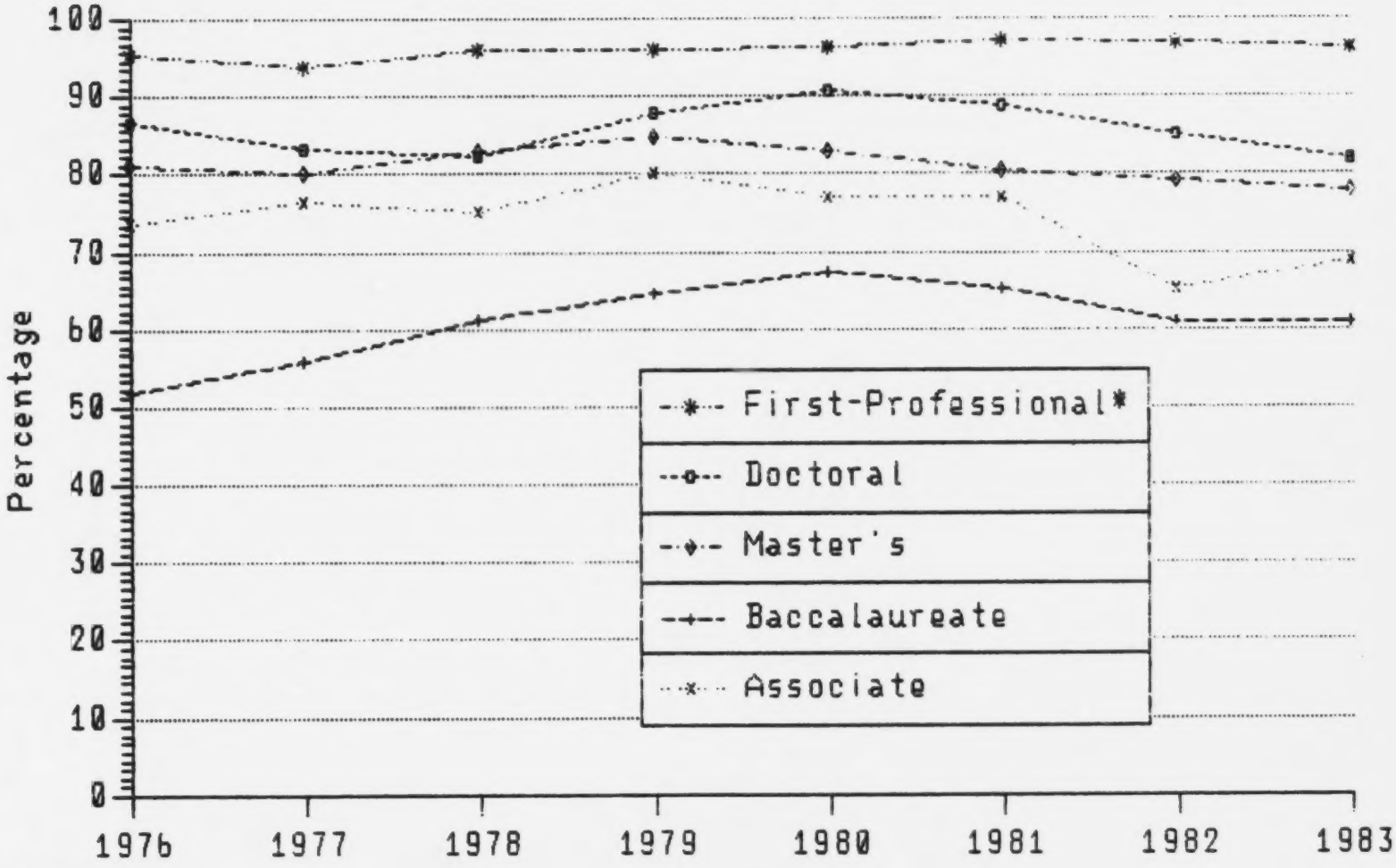
PERCENTAGE OF FULL-TIME EMPLOYED WITH DEGREE-RELATED EMPLOYMENT 1976-1983



*Includes interning Podiatry graduates

FIGURE 2

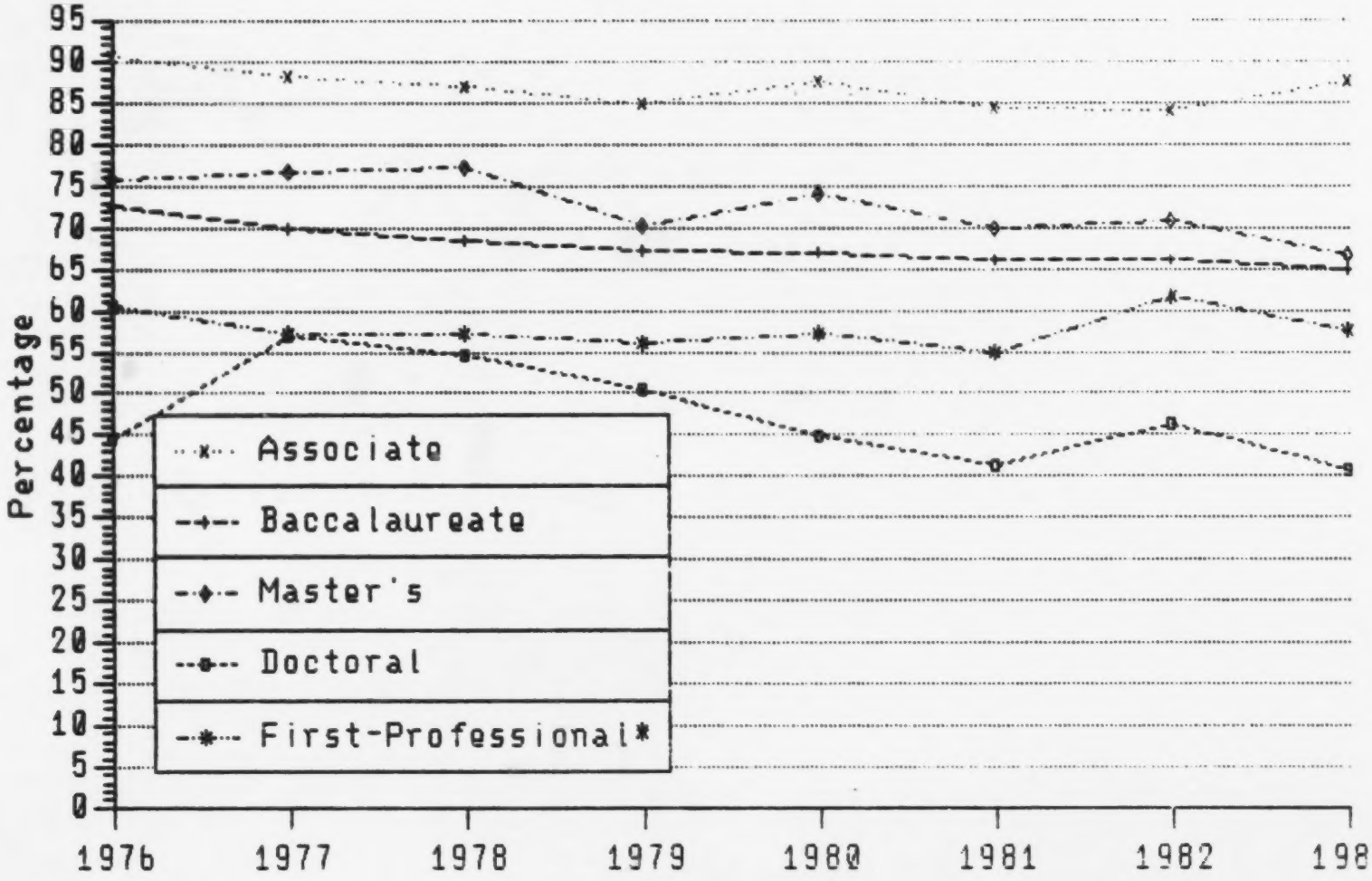
DEGREE-RELATED FULL-TIME CIVILIAN LABOR MARKET EMPLOYMENT 1976-1983



*Includes interning Podiatry graduates

FIGURE 3

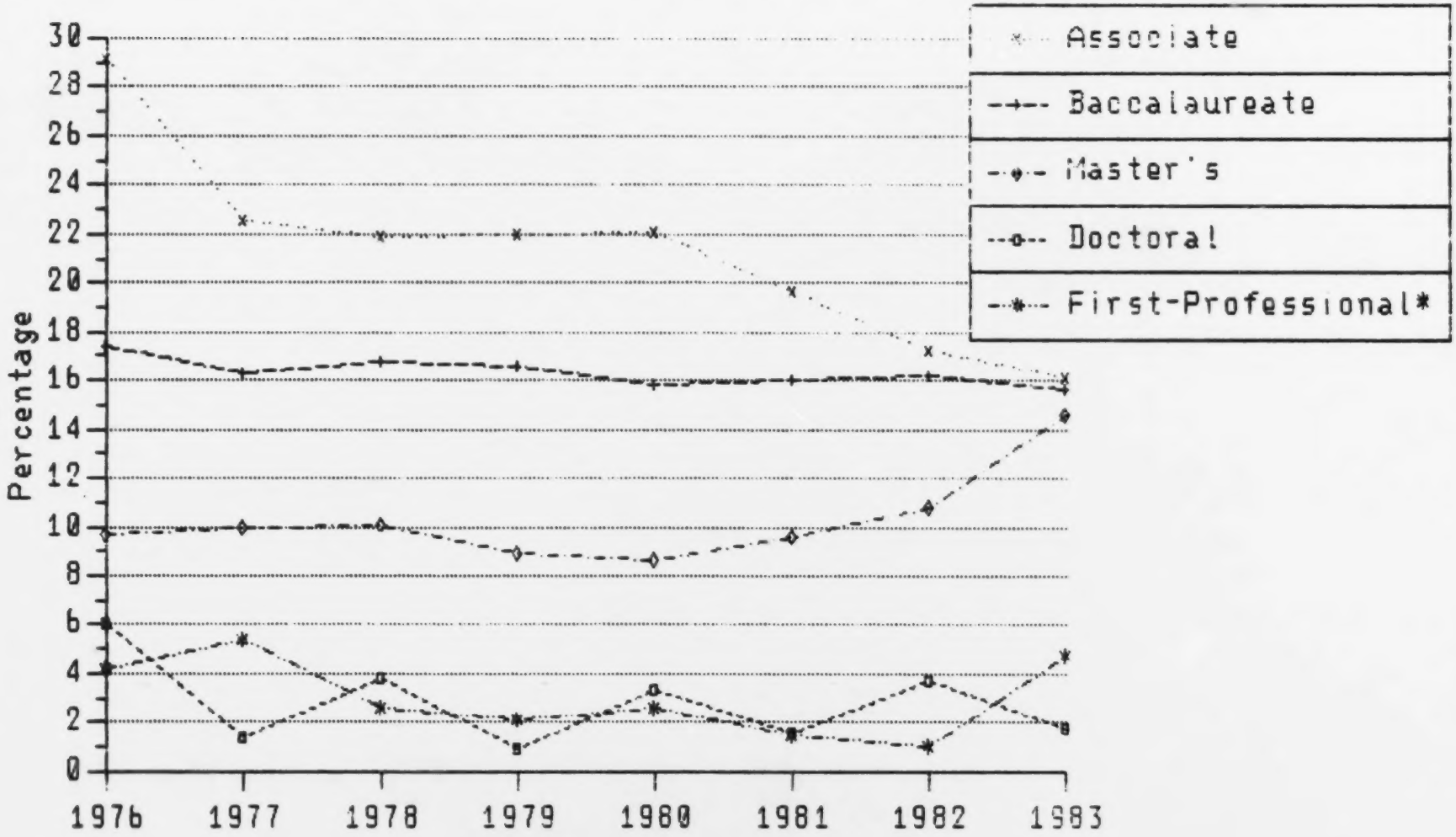
PERCENTAGE OF FULL-TIME EMPLOYED WITH EMPLOYMENT IN PENNSYLVANIA 1976-1983



*Does not include interning Podiatry graduates

FIGURE 4

TRENDS IN THE PURSUIT OF AN ADVANCED DEGREE 1976-1983



*Does not include interning Podiatry graduates

first six sections of this report in a manner similar to those provided in prior reports.

As indicated in Section I of this report, the new classification system has not only permitted greater specificity within a program class but it has also, in many instances, completely changed the old designations used for some of the degree fields and has, in some instances, broken a major degree field apart by placing specific degree fields in widely different categories. As a result, it was not possible to show degree field trends at the two-year associate degree level because of the magnitude of the changes that had been made in the classification of programs that are typically associated with the two-year degree. Fortunately, however, it did prove possible to create tables showing changes at three year intervals (1977, 1980, 1983) for the higher level degrees by using those CIP codes that can be clearly crosswalked from the old HEGIS system and by combining CIP categories, where necessary, to approximate the older HEGIS categories. The results of this effort are to be found below in Tables 6.0 through 6.3.

Baccalaureate Degree Postgraduate Activity by Degree Program, 1977, 1980, and 1983

Table 6.0 provides a comparison of results over time for baccalaureate graduates with regard to the proportion of full-time, degree-related employment overall and in the Civilian Labor Market and with regard to the proportion of full-time employed baccalaureate graduates whose employment was in Pennsylvania rather than outside of Pennsylvania.

As shown in Table 6.0, the following baccalaureate degree fields had a steady pattern of decline in degree-related Civilian Labor Market employment over the years 1977, 1980, and 1983:

Law	75.0% - 42.9% - 11.1%
Communications	49.4% - 48.0% - 44.5%

In contrast, the following baccalaureate degree fields experienced a steady increase in degree-related employment during the same time intervals:

Interdisciplinary Studies	37.9% - 42.7% - 66.3%
Psychology	37.7% - 41.1% - 50.2%
Agriculture and Natural Resources	58.2% - 66.2% - 68.1%
Foreign Languages	27.1% - 30.7% - 33.6%
Letters	37.4% - 40.4% - 43.3%

Some of the baccalaureate degree fields of Table 6.0 suffered a decline in 1980 followed by a rebound to a level higher than that for 1977.

Library Science	67.5% - 65.0% - 79.3%
Social Sciences	39.3% - 38.9% - 41.4%

Three degree fields in Table 6.0 experienced a rise in degree-related Civilian Labor Market employment in 1980 followed by a decline to the original 1977 value.

TABLE 6.0

A COMPARISON OVER TIME OF BACCALAUREATE GRADUATE RATES OF FULL-TIME EMPLOYMENT IN THE FIELD OF PREPARATION AND IN PENNSYLVANIA 1977 TO 1983

DEGREE PROGRAM	EMPLOYED IN FIELD[1]			EMPLOYED IN PENNSYLVANIA[2]		
	1977	1980	1983	1977	1980	1983
	(%)	(%)	(%)	(%)	(%)	(%)
Agriculture and Natural Resources	50.8 (58.2)	56.8 (66.2)	58.4 (68.1)	61.6	61.7	62.8
Architecture and Environmental Design	56.4 (67.1)	72.9 (86.7)	61.5 (67.2)	61.4	55.4	51.0
Area Studies	10.5 (14.3)	17.9 (25.0)	8.8 (15.8)	52.6	68.4	45.5
Biological Sciences	20.1 (36.7)	26.7 (53.2)	24.7 (52.0)	69.9	70.6	65.8
Business and Management	59.2 (64.7)	68.0 (73.4)	59.6 (65.1)	72.8	70.0	68.1
Communications	46.1 (49.4)	45.0 (48.0)	41.5 (44.5)	69.6	69.5	66.1
Computer and Information Sciences	79.4 (87.5)	86.2 (90.2)	64.9 (70.9)	72.5	57.6	62.8
Education	48.2 (60.6)	57.7 (63.6)	48.8 (56.2)	74.4	71.1	68.6
Engineering	77.7 (86.1)	86.5 (93.5)	59.0 (71.1)	46.6	44.9	37.5
Fine and Applied Arts	37.5 (45.6)	41.5 (49.9)	40.5 (51.1)	64.1	67.2	62.3
Foreign Languages	19.4 (27.1)	24.0 (30.7)	24.2 (33.6)	54.4	64.2	52.7
Health Professions	80.9 (85.4)	88.0 (93.5)	76.8 (88.8)	80.6	81.9	78.8
Home Economics	45.7 (53.3)	66.0 (73.8)	57.6 (73.8)	74.1	69.1	67.5

TABLE 6.0 (Continued)

DEGREE PROGRAM	EMPLOYED IN FIELD[1] 1977	1980	1983	EMPLOYED IN PENNSYLVANIA[2] 1977	1980	1983
	(%)	(%)	(%)	(%)	(%)	(%)
Interdisciplinary Studies	26.9 (37.9)	31.5 (42.7)	33.5 (66.3)	68.1	67.0	57.6
Law	37.5 (75.0)	16.2 (42.9)	4.5 (11.1)	100.0	23.1	66.7
Letters	27.3 (37.4)	30.4 (40.4)	32.4 (43.3)	64.9	66.8	58.7
Library Science	61.7 (67.5)	58.2 (65.0)	76.6 (79.3)	76.8	90.6	69.2
Mathematics	54.0 (70.1)	66.3 (80.4)	59.8 (75.8)	68.6	60.3	52.2
Physical Sciences	29.2 (61.5)	38.4 (69.6)	25.4 (50.8)	61.1	53.8	56.6
Psychology	27.8 (37.7)	30.0 (41.1)	32.8 (50.2)	72.6	70.0	70.6
Public Affairs and Services	44.3 (48.8)	50.9 (56.8)	42.0 (51.9)	78.0	73.0	74.5
Social Sciences	28.6 (39.3)	28.1 (38.9)	29.3 (41.4)	66.1	65.8	57.7
Theology	32.9 (48.6)	38.4 (56.9)	32.3 (48.3)	51.7	65.6	66.0
ALL REPORTED GRADUATES	46.8 (55.9)	56.8 (67.4)	49.7 (61.0)	69.9	67.0	64.9

[1]The percentage value shown in parentheses represents a percentage of those graduates who entered the Civilian Labor Market, i.e., seeking a position or working part-time or full-time. The upper figure represents a proportion (%) of all reported graduates.

[2]The percentage figures shown here represent the proportion of full-time employed graduates who were employed full-time in Pennsylvania.

Architecture and Environmental Design	61.7% - 86.7% - 67.2%
Theology	48.6% - 56.9% - 48.3%
Business and Management	64.7% - 73.4% - 65.1%

Seven baccalaureate degree fields had a pattern of gain in 1980 and then decline to a value above that for 1977.

Biological Sciences	36.7% - 53.2% - 52.0%
Home Economics	53.3% - 73.8% - 66.3%
Mathematics	70.1% - 80.4% - 75.8%
Fine and Applied Arts	45.6% - 49.9% - 51.1%
Health Professions	85.4% - 93.5% - 88.8%
Public Affairs and Services	48.8% - 56.8% - 51.9%
Area Studies	14.3% - 25.0% - 15.8%

In contrast, four baccalaureate degree fields had a pattern of gain in 1980 followed by a decline to a level below that of 1977.

Computer and Information Sciences	87.5% - 90.2% - 70.9%
Engineering	86.1% - 93.5% - 71.1%
Physical Sciences	61.5% - 69.6% - 50.8%
Education	60.6% - 63.6% - 56.2%

These declines are very possibly a result of the recent economic recession and related budget constraints.

With regard to employment in Pennsylvania, only the baccalaureate degree fields of Agriculture and Natural Resources and Theology had a pattern of increase rather than decline.

Master's Degree Postgraduate Activity by Degree Program, 1977, 1980, and 1983

Table 6.1 provides a comparison of results over time for master's degree graduates with regard to the proportion of full-time, degree-related employment overall and in the Civilian Labor Market and with regard to the proportion of full-time employed graduates finding employment in Pennsylvania.

Of the twenty-three degree fields of Table 6.1, only two had a pattern of steady decline in degree-related Civilian Labor Market employment over the years 1977, 1980, and 1983:

Engineering	93.4% - 78.9% - 76.6%
Education	83.1% - 78.9% - 76.6%

Only four of the degree fields of Table 6.1 had a pattern of steady growth in degree-related Civilian Labor Market employment over this period:

Area Studies	0.0% - 50.0% - 100.0%
Law	90.0% - 100.0% - NA
Library Sciences	57.9% - 58.7% - 61.1%
Mathematics	78.0% - 80.6% - 80.0%

TABLE 6.1

A COMPARISON OVER TIME OF MASTER'S DEGREE GRADUATE RATES OF FULL-TIME EMPLOYMENT IN THE FIELD OF PREPARATION AND IN PENNSYLVANIA 1977 TO 1983

DEGREE PROGRAM	EMPLOYED IN FIELD[1]			EMPLOYED IN PENNSYLVANIA[2]		
	1977	1980	1983	1977	1980	1983
	(%)	(%)	(%)	(%)	(%)	(%)
Agriculture and Natural Resources	34.8 (66.7)	55.0 (78.6)	40.0 (66.7)	55.5	50.0	66.7
Architecture and Environmental Design	76.9 (83.3)	68.8 (73.3)	66.7 (77.0)	56.5	76.9	40.0
Area Studies	0.0 (0.0)	20.0 (50.0)	50.0 (100.0)	100.0	100.0	100.0
Biological Sciences	54.5 (74.0)	52.5 (80.5)	44.9 (75.0)	67.2	61.8	56.8
Business and Management	80.7 (85.8)	84.1 (89.0)	79.7 (87.1)	65.8	71.8	57.5
Communications	64.3 (69.2)	86.1 (91.2)	56.3 (56.3)	55.9	54.5	57.1
Computer and Information Sciences	81.5 (95.7)	73.0 (92.0)	26.3 (100.0)	47.8	78.8	60.0
Education	77.4 (83.1)	76.1 (78.9)	70.0 (76.6)	87.4	83.7	77.8
Engineering	74.4 (93.4)	75.4 (92.7)	55.2 (84.7)	48.7	55.7	44.0
Fine and Applied Arts	56.6 (59.7)	69.2 (72.0)	62.3 (67.2)	74.5	65.0	54.2
Foreign Languages	34.4 (50.0)	55.0 (64.7)	40.0 (50.0)	53.3	41.7	58.3
Health Professions	63.5 (69.6)	90.9 (94.0)	82.1 (92.0)	73.9	75.7	76.4
Home Economics	26.7 (80.0)	27.3 (60.0)	42.9 (75.0)	25.0	66.7	33.3
Interdisciplinary Studies	75.0 (75.0)	73.7 (80.0)	66.7 (73.7)	76.5	75.8	62.5

TABLE 6.1 (Continued)

DEGREE PROGRAM	EMPLOYED IN FIELD[1] 1977	1980	1983	EMPLOYED IN PENNSYLVANIA[2] 1977	1980	1983
	(%)	(%)	(%)	(%)	(%)	(%)
Law	90.0 (90.0)	97.3 (100.0)	NR[3] (NR)	85.0	37.5	NR[3]
Letters	38.6 (50.0)	64.2 (81.3)	50.8 (66.0)	73.5	60.0	75.0
Library Science	56.4 (57.9)	58.7 (58.7)	55.0 (61.1)	78.6	90.0	66.7
Mathematics	66.1 (78.0)	59.5 (80.6)	57.1 (80.0)	63.6	55.5	59.3
Physical Sciences	60.0 (76.2)	63.6 (88.7)	46.3 (77.5)	54.5	64.2	44.4
Psychology	48.1 (66.1)	75.4 (88.4)	56.0 (76.0)	81.6	73.0	87.3
Public Affairs and Services	70.5 (73.7)	73.3 (75.7)	64.5 (66.3)	39.3	65.5	62.1
Social Sciences	50.4 (63.9)	62.0 (74.7)	43.0 (62.5)	79.5	58.4	62.9
Theology	100.0 (100.0)	92.6 (100.0)	24.0 (46.2)	44.4	100.0	30.8
ALL REPORTED GRADUATES	72.1 (80.2)	75.7 (82.9)	64.8 (78.0)	76.8	74.0	66.6

[1]The figures in parentheses represents a percentage of those graduates who entered the Civilian Labor Market, i.e, seeking a position or working part-time or full-time. The upper figure represents a proportion (%) of all reported graduates.

[2]The percentage figures shown here represent the proportion of full-time employed graduates who were employed full-time in Pennsylvania.

[3]NR = Not Reported, i.e., there were no reported graduates for this degree program.

One degree field was characterized by a decline in 1980 followed by an increase to a level higher than that for 1977 graduates

Computer and Information Sciences	95.7% - 92.0% - 100.0%

Two degree fields declined in 1980 and then rebounded to a level that was lower than the figure for 1977:

Architecture and Environmental Design	83.3% - 73.3% - 77.0%
Home Economics	80.0% - 60.0% - 75.0%

Two degree fields increased in 1980 and then declined to a level equal to that for the graduates of 1977.

Agriculture and Natural Resources	66.7% - 78.6% - 66.7%
Foreign Languages	50.0% - 64.7% - 50.0%

Seven degree fields in Table 6.1 experienced a gain between 1977 and 1980 followed by a decline to a level of degree-related Civilian Labor Market employment still higher than that found for the graduates of 1977:

Health Professions	69.6% - 94.0% - 92.0%
Letters	50.0% - 81.3% - 66.0%
Psychology	66.1% - 88.4% - 76.0%
Fine and Applied Arts	59.7% - 72.0% - 67.2%
Business and Management	85.8% - 89.0% - 87.1%
Physical Sciences	76.2% - 88.7% - 77.5%
Biological Sciences	74.0% - 80.5% - 75.0%

Five degree fields in Table 6.1 experienced a gain in degree-related Civilian Labor Market employment in 1980 followed by a decline to a level lower than that experienced by the graduates of 1977:

Theology	100.0% - 100.0% - 46.2%
Communications	69.2% - 91.2% - 56.3%
Public Affairs and Services	73.7% - 75.7% - 66.3%
Social Sciences	69.3% - 74.7% - 62.5%
Interdisciplinary Studies	75.0% - 80.0% - 73.7%

With regard to the proportion of full-time employed master's degree graduates finding employment in Pennsylvania, nine degree fields experienced an overall increase and one, Area Studies had the same rate in 1983 as for the 1977 graduates. The nine degree fields with an increase in Pennsylvania employment were: Agriculture and Natural Resources, Communications, Computer and Information Sciences, Foreign Languages, Health Professions, Home Economics, Letters, Psychology, and the degree field of Public Affairs and Services.

Doctoral Degree Postgraduate Activity by Degree Program, 1977, 1980, and 1983

Table 6.2 presents, in a similar manner, findings for doctoral degree graduates at three year intervals, i.e., 1977, 1980, and 1983:

TABLE 6.2

A COMPARISON OVER TIME OF DOCTORAL DEGREE GRADUATE RATES OF FULL-TIME EMPLOYMENT IN THE FIELD OF PREPARATION AND IN PENNSYLVANIA 1977 TO 1983

DEGREE PROGRAM	EMPLOYED IN FIELD[1]			EMPLOYED IN PENNSYLVANIA[2]		
	1977	1980	1983	1977	1980	1983
	(%)	(%)	(%)	(%)	(%)	(%)
Agriculture and Natural Resources	90.0 (90.0)	80.0 (80.0)	100.0 (100.0)	11.1	20.0	14.3
Biological Sciences	78.3 (83.7)	83.7 (97.6)	74.2 (79.3)	43.6	36.6	38.5
Business and Management	92.9 (92.9)	100.0 (100.0)	100.0 (100.0)	14.3	20.0	23.1
Computer and Information Sciences	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	22.2	40.0	64.3
Education	78.3 (78.8)	84.4 (85.6)	78.3 (78.3)	84.1	59.1	53.8
Engineering	95.7 (95.7)	97.4 (97.4)	90.0 (93.1)	45.5	26.3	33.3
Fine and Applied Arts	78.6 (78.6)	66.7 (66.7)	50.0 (50.0)	63.6	50.0	50.0
Foreign Languages	80.0 (80.0)	50.0 (50.0)	NR[3] (NR)	77.8	100.0	NR[3]
Health Professions	85.7 (85.7)	86.7 (96.3)	63.7 (70.0)	66.7	46.2	60.0
Home Economics	100.0 (100.0)	80.0 (80.0)	42.9 (42.9)	66.7	0.0	0.0
Interdisciplinary Studies	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	100.0	100.0	0.0
Letters	62.5 (62.5)	80.8 (80.8)	87.5 (87.5)	65.0	28.6	33.3

TABLE 6.2 (Continued)

DEGREE PROGRAM	EMPLOYED IN FIELD[1] 1977	1980	1983	EMPLOYED IN PENNSYLVANIA[2] 1977	1980	1983
	(%)	(%)	(%)	(%)	(%)	(%)
Mathematics	93.8 (100.0)	85.7 (85.7)	100.0 (100.0)	40.0	66.7	12.5
Physical Sciences	81.9 (90.7)	90.3 (93.3)	84.4 (87.1)	45.1	33.3	32.1
Psychology	76.2 (80.0)	94.7 (94.7)	74.2 (76.6)	47.1	33.3	48.0
Public Affairs and Services	88.9 (88.9)	100.0 (100.0)	100.0 (100.0)	25.0	25.0	33.3
Social Sciences	74.5 (74.5)	94.7 (94.7)	58.3 (58.3)	31.8	77.8	70.0
ALL REPORTED GRADUATES	82.0 (83.2)	87.7 (90.7)	79.8 (81.9)	57.0	44.9	40.7

[1]The figures in parentheses represents a percentage of those graduates who entered the Civilian Labor Market, i.e, those seeking a position or working part-time or full-time. The upper figure represents a proportion (%) of all reported graduates.

[2]The percentage figures shown here represent the proportion of full-time employed graduates who were employed full-time in Pennsylvania.

[3]NR = Not Reported, i.e., there were no reported graduates for this degree program.

In Table 6.2, only one degree field had a pattern of steady gain over this period:

Letters	62.5% - 80.8% - 87.5%

One degree field experienced a decline in 1980 followed by an overall gain:

Agriculture and Natural Resources	90.0% - 80.0% - 100.0%

Two degree fields experienced growth followed by a level value for the last three year period at 100% for each year, i.e., 1980 and 1983:

Public Affairs and Services	88.9% - 100.0% - 100.0%
Business and Management	92.9% - 100.0% - 100.0%

Two degree fields in Table 6.2 had no change in the level of degree-related Civilian Labor Market employment during this period:

Computer and Information Sciences	100.0% - 100.0% - 100.0%
Interdisciplinary Studies	100.0% - 100.0% - 100.0%

Three degree fields in Table 6.2 experienced a decline over these years:

Home Economics	100.0% - 80.0% - 42.9%
Foreign Languages	80.0% - 50.0% - NA
Fine and Applied Arts	78.6% - 66.7% - 50.0%

Seven of the degree fields of Table 6.2 were characterized by an increase in the rate of degree-related Civilian Labor Market employment in 1980 followed by a decline to a rate below that for the graduates of 1977:

Social Sciences	74.5% - 94.7% - 58.3%
Health Professions	85.7% - 96.3% - 70.0%
Biological Sciences	83.7% - 97.6% - 79.3%
Physical Sciences	90.7% - 93.3% - 87.1%
Psychology	80.0% - 94.7% - 76.6%
Engineering	95.7% - 97.4% - 93.1%
Education	78.8% - 85.6% - 78.3%

With regard to the rate of Pennsylvania employment for those in Table 6.2 who found full-time employment, only seven degree fields had a pattern of an increase in Pennsylvania employment between 1977 and 1983. These seven degree fields were: Agriculture and Natural Resources, Business and Management, Computer and Information Sciences, Foreign Languages, Psychology, Public Affairs and Services and Social Sciences.

First-Professional Postgraduate Activity by Degree Program, 1977, 1980, and 1983

Table 6.3 indicates the patterns of change for the first-professional degree fields over two three year intervals, i.e., for the years 1977, 1980, and 1983.

TABLE 6.3

A COMPARISON OF FIRST-PROFESSIONAL DEGREE GRADUATE RATES OF FULL-TIME EMPLOYMENT IN THE FIELD OF PREPARATION AND IN PENNSYLVANIA 1977 TO 1983

DEGREE PROGRAM	EMPLOYED IN FIELD[1] 1977	1980	1983	EMPLOYED IN PENNSYLVANIA[2] 1977	1980	1983
	(%)	(%)	(%)	(%)	(%)	(%)
Dentistry	89.0 (100.0)	82.2 (99.1)	57.3 (95.0)	71.2	78.4	66.2
Medicine	90.0 (99.9)	99.9 (100.0)	97.8 (99.8)	47.2	51.4	54.2
Optometry	96.8 (96.8)	94.0 (95.2)	90.2 (92.3)	46.2	35.0	38.4
Osteopathy	100.0 (100.0)	100.0 (100.0)	93.7 (100.0)	50.5	58.9	66.3
Pharmacy[3]	100.0 (100.0)	NR (NR)	100.0 (100.0)	0.0	NR	57.1
Podiatry[4]	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	46.3	50.5	50.0
Veterinary Medicine	89.7 (100.0)	85.7 (94.7)	96.4 (100.0)	46.0	94.7	43.9
Law	82.6 (84.0)	86.8 (88.1)	77.1 (79.8)	68.0	63.1	60.6
ALL REPORTED GRADUATES	88.6 (93.7)	93.8 (96.2)	81.1 (91.9)	57.1	57.3	57.4

[1]The figures in parentheses represents a percentage of those graduates who entered the Civilian Labor Market, i.e, seeking a position or working part-time or full-time. The upper figure represents a proportion (%) of all reported graduates.

[2]The percentage figures shown here represent the proportion of full-time employed graduates who were employed in Pennsylvania.

[3]Data on Pharmacy and Veterinarian graduates of 1977 and 1980 were not available. Data for the graduates of 1978 and 1981 were therefore substituted wherever possible.

[4]The Podiatry graduates of 1983 were reported as pursuing an advanced degree (Internship). This was in contrast to previous years in which they were categorized as employed in their field of preparation. Data for the graduates of 1982 has been substituted to permit meaningful comparisons.

No change in the rate of full-time, degree-related Civilian Labor Market employment was noted over these years for the degree fields of:

Medicine	99.9% - 100.0% - 99.8%
Osteopathy	100.0% - 100.0% - 100.0%
Pharmacy	100.0% - NA - 100.0%
Podiatry	100.0% - 100.0% - 100.0%

One first-professional degree field was characterized by growth in 1983 following a decline in degree-related Civilian Labor Market employment in 1980 with no overall change in the rate of employment between 1977 and 1983:

Veterinary Medicine	100.0% - 94.7% - 100.0%

One degree field had a pattern of growth in 1980 followed by a decline to a level below that for the graduates of 1977:

Law	84.0% - 88.1% - 79.8%

Finally, two first-professional degree fields had a pattern of continual decline:

Dentistry	100.0% - 99.1% - 95.0%
Optometry	96.8% - 95.2% - 92.3%

With regard to the employment of first-professionals in Pennsylvania, there were four degree fields whose full-time employed graduates had a pattern of increasing full-time employment in Pennsylvania, i.e., Medicine (47.2 to 54.2%), Osteopathic Medicine (50.5 to 66.3%), Pharmacy (0.0 to 57.1%), and Podiatric Medicine (46.3 to 50.0%).

The finding of a decline in degree-related, Civilian Labor Market employment for Law graduates from 84 percent in 1977 to 79.8 percent in 1983 seems to be in agreement with recent statements by representatives of the legal profession that there is currently a surplus of legal manpower relative to demand. Dentistry graduates were also found to have a downward trend in degree-related employment, i.e., it went from 100.0 percent in 1977 to 99.1 percent in 1980 and then down to 95.0 percent in 1983, possibly for similar reasons.

Not unexpectedly, most of the other first-professional degree fields were characterized by either a pattern of increase or by remaining at or near a figure of 100 percent for full-time, degree-related employment, e.g., Medicine, Osteopathy, Pharmacy, Podiatry and Veterinary Medicine.

With regard to Pennsylvania based employment, these professionals show a pattern of an overall increase in Pennsylvania based employment with the exceptions of Law (77.1% to 60.6%), Optometry (46.2% to 38.4%), Dentistry (71.2% to 66.2%) and Veterinary Medicine (46.0% to 43.9%) between 1977 and 1983.

SOME COMMENTS ON THESE OBSERVED TRENDS

The results presented in Section XII of this report reflect the impact of changes over the last six years in federal priorities and the impact of the recent economic recession. If the economy continues to improve, or new priorities enter into the picture, the picture shown here will change. If the predicted decline in the number of graduates occurs as a result of the recent "Baby Bust" decline in births and an anticipated rise in retirements and deaths occurs as the post World War II generation continues to age, these trends may change from a picture of relative surplus to one of unmet demand.

Future reports in this series will permit tracking of such trends in terms of the new CIP codes and will permit more detailed tracking of associate degree trends than has been possible to date.

XIII. POSTGRADUATE ACTIVITY FINDINGS FOR EACH INSTITUTIONAL SECTOR

Pennsylvania has a complex higher education structure with a variety of funding sources and missions characterizing the different types of institution that exist in the state. As a consequence, various categories have been established in order to define institutional sectors according to their source of funding, their mission, and/or pattern of governance. This section of the report is designed to use these categories to provide data for the use of institutional planners who may wish to compare their own institution with other institutions in the same category. It should be remembered, however, that these institutional sectors are not necessarily homogenous and may contain institutions that vary widely in size and mission, e.g., the independent private colleges and universities.

Table 7.0 is a summarization of the postgraduate activity of graduates from the various sectors using the various measures that have been utilized in other sections of this report. The measures in Table 7.0 are derived from data in Tables 7.1 through 7.5, which follow. Tables 7.1 through 7.5 summarize postgraduate activity findings for the associate degree (Table 7.1), baccalaureate degree (Table 7.2), master's degree (Table 7.3), doctoral degree (Table 7.4), and first-professional degree (Table 7.5) graduates of 1982-83. As in Tables 1.0, 2.0, 3.0, 4.0, and 5.0 of this report, they list the number of graduates in each category of activity followed by the percentage the number of graduates in each category is of all reported graduates. Finally, the percentage of graduates in each of the Civilian Labor Market categories is obtained by excluding those who are in military service, those seeking an advanced degree or those engaged in other activities unrelated to employment or the seeking of employment.

No attempt has been made here to present sector data with regard to individual degree fields. This has been done in order to keep the report within reasonable bounds. Those who have a need for such detailed information can, however, request a copy of one or more of the relevant unpublished tables (see Appendix B, Tables 2.1A through 2.8).

When the comparisons of Table 7.0 are examined, it becomes apparent that the 1983 associate degree graduates of the state-aided colleges and universities and of the state system universities had the highest rates of full-time, degree-related Civilian Labor Market employment, 96.9 and 89.8 percent, respectively. Similar observations concerning unemployment, pursuit of an advanced degree, or concerning the rate of Pennsylvania full-time employment can also be made using Table 7.5, e.g., 30 percent of associate degree graduates from the state-related universities were reported as unemployed in 1983.

At the baccalaureate fegree level, Table 7.0 indicates that the highest rate of reported full-time, degree-related Civilian Labor Market employment characterized the graduates of the state-aided colleges and universities (83.5%) and the independent private colleges and universities (63.9%) while the graduates of the state-related and the state system universities had the lowest rate, i.e., 54.0 percent and 59.6 percent, respectively. The state-related universities reported the highest rate of Civilian Labor Market unemployment (24.5%) and the state-aided colleges and universities reported the lowest rate (6.1%). Similar analyses can be made of the other measures with regard to the baccalaureate graduates of 1983.

TABLE 7.0

A COMPARISON BY DEGREE LEVEL OF THE INSTITUTIONAL SECTORS WITH REGARD TO SELECTED MEASURES OF POSTGRADUATE ACTIVITY, 1983

	EMPLOYED FULL-TIME IN DEGREE FIELD	LABOR MARKET[1] EMPLOYMENT IN FIELD PREPARED	LABOR MARKET[1] UNEMPLOYMENT	PURSUING ADVANCED DEGREE	PENNSYLVANIA FULL-TIME EMPLOYMENT
	(%)	(%)	(%)	(%)	(%)
I. Associate Degree					
State System	81.6	89.8	10.1	7.9	79.0
State-Related	30.3	44.0	30.0	28.7	79.9
State-Aided	83.4	96.9	.0	12.4	81.9
Private	53.0	74.6	13.1	27.6	93.2
Community Colleges	47.6	63.1	11.6	21.9	95.7
Proprietary Schools	71.4	77.5	12.6	3.8	80.0
State School of Technology	71.1	77.6	9.2	16.1	97.1
II. Bachelor's Degree					
State System	51.9	59.6	15.8	10.1	73.8
State-Related	44.1	54.0	24.5	14.3	58.1
State-Aided	77.3	83.5	4.3	6.1	65.8
Private	49.4	63.9	13.1	20.0	61.7
III. Master's Degree					
State System	73.4	77.7	7.4	3.4	78.7
State-Related	55.7	71.2	15.5	18.0	58.3
State-Aided	71.3	92.3	.0	17.8	73.7
Private	62.9	80.8	2.7	21.3	58.9
IV. Doctoral Degree					
State System	100.0	100.0	.0	.0	25.0
State-Related	74.3	75.9	10.3	.7	38.1
State-Aided	80.0	90.3	3.2	11.4	51.7
Private	87.8	87.8	.0	.0	41.1
V. First Professional Degree					
State-Related	79.9	88.3	3.8	5.3	70.1
State-Aided	84.5	98.7	.8	11.7	49.3
Private	58.9	60.7	.0	2.9	48.2

[1]Civilian Labor Market

TABLE 7.1

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY INSTITUTIONAL SECTOR FOR ASSOCIATE DEGREE GRADUATES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
State System	#	76	49	13	0	0	0	7	6	0	1
	%		64.5	17.1	.0	.0	.0	9.2	7.9	.0	1.3
	%	69	71.0	18.8	.0	.0	.0	10.1			
State-Related	#	1,146	268	79	109	16	80	237	329	4	24
	%		23.4	6.9	9.5	1.4	7.0	20.7	28.7	.3	2.1
	%	789	34.0	10.0	13.8	2.0	10.1	30.0			
State-Aided	#	218	149	33	0	0	6	0	27	0	3
	%		68.3	15.1	.0	.0	2.8	.0	12.4	.0	1.4
	%	188	79.3	17.6	.0	.0	3.2	.0			
Private	#	591	293	20	35	4	13	55	163	0	8
	%		49.6	3.4	5.9	.7	2.2	9.3	27.6	.0	1.4
	%	420	69.8	4.8	8.3	1.0	3.1	13.1			
Community Colleges	#	5,671	2,577	125	676	20	385	495	1,240	20	133
	%		45.4	2.2	11.9	.4	6.8	8.7	21.9	.4	2.3
	%	4,278	60.2	2.9	15.8	.5	9.0	11.6			
Proprietary Schools	#	4,173	2,355	624	263	32	81	485	157	27	149
	%		56.4	15.0	6.3	.8	1.9	11.6	3.8	.6	3.6
	%	3,840	61.3	16.2	6.8	.8	2.1	12.6			

TABLE 7.1 (Continued)

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
State School of Technology	#	83	57	2	10	0	0	7	5	2	0
	%		68.7	2.4	12.0	.0	.0	8.4	6.0	2.4	.0
		76	75.0	2.6	13.2	.0	.0	9.2			
TOTAL	#	11,958	5,748	896	1,093	72	565	1,286	1,927	53	318
	%		48.1	7.5	9.1	.6	4.7	10.8	16.1	.4	2.7
	%	9,660	59.5	9.3	11.3	.7	5.8	13.3			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

TABLE 7.2

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY INSTITUTIONAL SECTOR FOR BACCALAUREATE DEGREE GRADUATES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
State System	#	7,514	2,820	1,081	725	178	708	1,034	758	108	102
	%		37.5	14.4	9.6	2.4	9.4	13.8	10.1	1.4	1.4
	%	6,546	43.1	16.5	11.1	2.7	10.8	15.8			
State-Related	#	5,249	1,284	1,028	414	196	305	1,048	751	181	42
	%		24.5	19.6	7.9	3.7	5.8	20.0	14.3	3.4	.8
	%	4,275	30.0	24.0	9.7	4.6	7.1	24.5			
State-Aided	#	577	295	151	32	19	14	23	35	3	5
	%		51.1	26.2	5.5	3.3	2.4	4.0	6.1	.5	.9
	%	534	55.2	28.3	6.0	3.6	2.6	4.3			
Private	#	12,188	3,741	2,279	894	597	684	1,233	2,441	130	189
	%		30.7	18.7	7.3	4.9	5.6	10.1	20.0	1.1	1.6
	%	9,428	39.7	24.2	9.5	6.3	7.3	13.1			
TOTAL	#	25,528	8,140	4,539	2,065	990	1,711	3,338	3,985	422	338
	%		31.9	17.8	8.1	3.9	6.7	13.1	15.6	1.7	1.3
	%	20,783	39.2	21.8	9.9	4.8	8.2	16.1			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

TABLE 7.3

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY INSTITUTIONAL SECTOR FOR MASTER'S DEGREE GRADUATES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
State System	#	730	414	122	69	9	25	51	25	2	13
	%		56.7	16.7	9.5	1.2	3.4	7.0	3.4	.3	1.8
	%	690	60.0	17.7	10.0	1.3	3.6	7.4			
State-Related	#	560	177	135	26	10	22	68	101	12	9
	%		31.6	24.1	4.6	1.8	3.9	12.1	18.0	2.1	1.6
	%	438	40.4	30.8	5.9	2.3	5.0	15.5			
State-Aided	#	101	52	20	4	0	2	0	18	0	5
	%		51.5	19.8	4.0	.0	2.0	.0	17.8	.0	5.0
	%	78	66.7	25.6	5.1	.0	2.6	.0			
Private	#	894	345	217	48	57	9	19	190	4	5
	%		38.6	24.3	5.4	6.4	1.0	2.1	21.3	.4	.6
	%	695	49.6	31.2	6.9	8.2	1.3	2.7			
TOTAL	#	2,285	988	494	147	76	58	138	334	18	32
	%		43.2	21.6	6.4	3.3	2.5	6.0	14.6	.8	1.4
	%	1,901	52.0	26.0	7.7	4.0	3.1	7.3			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

TABLE 7.4

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY INSTITUTIONAL SECTOR FOR DOCTORAL DEGREE GRADUATES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
State System	#	4	1	3	0	0	0	0	0	0	0
	%		25.0	75.0	.0	.0	.0	.0	.0	.0	.0
	%	4	25.0	75.0	.0	.0	.0	.0			
State-Related	#	148	41	69	4	4	12	15	1	1	1
	%		27.7	46.6	2.7	2.7	8.1	10.1	.7	.7	.7
	%	145	28.3	47.6	2.8	2.8	8.3	10.3			
State-Aided	#	35	15	13	0	1	1	1	4	0	0
	%		42.9	37.1	.0	2.9	2.9	2.9	11.4	.0	.0
	%	31	48.4	41.9	.0	3.2	3.2	3.2			
Private	#	90	28	51	9	2	0	0	0	0	0
	%		31.1	56.7	10.0	2.2	.0	.0	.0	.0	.0
	%	90	31.1	56.7	10.0	2.2	.0	.0			
TOTAL	#	277	85	136	13	7	13	16	5	1	1
	%		30.7	49.1	4.7	2.5	4.7	5.8	1.8	.4	.4
	%	270	31.5	50.4	4.8	2.6	4.8	5.9			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

TABLE 7.5

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY INSTITUTIONAL SECTOR FOR FIRST-PROFESSIONAL DEGREE GRADUATES, 1983

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART-TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
State-Related	#	1,122	624	273	36	9	35	39	60	32	14
	%		55.6	24.3	3.2	.8	3.1	3.5	5.3	2.9	1.2
	%	1,016	61.4	26.9	3.5	.9	3.4	3.8			
State-Aided	#	1,514	633	647	0	3	4	10	177	40	0
	%		41.8	42.7	.0	.2	.3	.7	11.7	2.6	.0
	%	1,297	48.8	49.9	.0	.2	.3	.8			
Private	#	173	35	67	46	20	0	0	5	0	0
	%		20.2	38.7	26.6	11.6	.0	.0	2.9	.0	.0
	%	168	20.8	39.9	27.4	11.9	.0	.0			
TOTAL	#	2,809	1,292	987	82	32	39	49	242	72	14
	%		46.0	35.1	2.9	1.1	1.4	1.7	8.6	2.6	.5
	%	2,481	52.1	39.8	3.3	1.3	1.6	2.0			

*PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

At the master's degree level, Table 7.0 indicates that, once again, graduates of the state-aided and the private colleges and universities had the highest rates of full-time, degree-related Civilian Labor Market employment, i.e., 92.3 and 80.8 percent, respectively.

Graduates with a doctorate from the various higher education sectors also varied with respect to full-time, degree-related, Civilian Labor Market employment with graduates of the state system of higher education (100.0%) and of the state-aided colleges and universities (90.3%) having the highest rates and the graduates of the private colleges and universities (87.8%) and the state-related (75.0%) universities having the lowest rates.

Finally, inspection of Table 7.0 indicates that, for the first-professional, degree graduates, the highest rate of degree-related, full-time employment was associated with the state-aided universities while graduates of professional schools associated with the state-related universities and the private colleges and universities ranked lower, i.e., 88.3 percent and 60.7 percent, respectively.

In terms of the proportion of full-time, degree-related employment in the Civilian Labor Market, the state-aided institutions ranked first at all degree levels except the doctorate level, where the state system institutions ranked first. In terms of unemployment, the state-aided institutions had the lowest rate of unemployment at all degree levels except the doctorate level, where both the state-aided and the state system institutions had a rate of 0.0 percent unemployment.

SOME COMMENTS ON THE HIGHER EDUCATION SECTOR FINDINGS

The relatively consistent differences between the sectors at every degree level may be due to the unique mix of professional preparations characteristic of each sector. Differences in the way the data is gathered by institutions in each sector may also play a role, e.g., higher unemployment rates would be found where the postgraduate activity status of graduates is determined very shortly after graduation. Finally, some of these institutional sectors may simply have more graduates in liberal arts and other degree programs that do not lead directly to degree-related employment.

APPENDIX A

A LISTING OF TWO-DIGIT CIP CATEGORY DEFINITIONS[1]

Code	Title and Definition
01.	Agribusiness and Agricultural Production
	Instructional programs that prepare individuals to apply scientific knowledge, methods, and technical skills in support of agribusiness and agricultural activities concerned with the production and preparation of crops and animals, supplies and services, mechanics, and with the processing of products.
02.	Agricultural Sciences
	Instructional programs that describe the production, processing, and distribution of food and fiber.
03.	Renewable Natural Resources
	Instructional programs that prepare individuals for activities involving the conservation and/or improvement of natural resources such as air, soil, water, land, fish, and wildlife for economic and recreational purposes.
04.	Architecture and Environmental Design
	Instructional programs that describe methods to create, adapt, alter, preserve, and control man's physical and social surroundings.
05.	Area and Ethnic Studies
	Instructional programs that describe the history, society, politics, culture, and economics of a particular geographic region or population subset.
06.	Business and Management
	Instructional programs that describe the processes of purchasing, selling, producing, and interchanging of goods, commodities, and services in profit making and non-profit public and private institutions and agencies.

[1]Derived from Malitz, Gerald S., "A Classification of Instructional Programs," National Center for Education Statistics, U.S. Department of Education, 1981

Code	Title and Definition

07. Business and Office

Instructional programs that prepare individuals for a variety of activities in planning, organizing, directing, and controlling all business office systems and procedures. Includes instruction in preparing, transcribing, systematizing, and preserving written communications and records; preparing and analyzing financial records; collecting accounts and receiving and disbursing money; gathering, processing and distributing information and mail; operating office machines and electronic data processing equipment; storing, distributing and accounting for inventories of materials; operating telephone switchboards and delivering messages; and performing other business office duties.

08. Marketing and Distribution

Programs that prepare individuals for occupations directed toward the flow of industrial and consumer goods in channels of trade, or the provision of services to consumers or users. These programs are concerned with marketing, sales, distribution, merchandising, and management, including ownership and management of enterprises engaged in marketing. Instructional programs are designed to prepare individuals to perform one or more of the marketing functions such as selling, buying, pricing, promoting, financing, transporting, storing, market research, and marketing management with varying emphases on technical knowledge of products and services marketed, related communication and computation skills, and abilities and attitudes associated with human relations and private enterprise.

09. Communications

Instructional programs that describe the creation, transmission, and evaluation of messages.

10. Communications Technologies

Instructional programs that prepare individuals to support and assist communication professionals and skilled communication workers, i.e., programs that stress specialized, practical knowledge related to the mechanical, scientific, or technical aspects of communications.

11. Computer and Information Sciences

Instructional programs that describe the coding, processing, and storage of data through repetitious and highly complex mathematical operations at high speed, and in accordance with strictly defined systems and procedures.

12. Consumer, Personal, and Miscellaneous Services

Instructional programs that prepare individuals to provide a variety of services to individual consumers as well as to organizations such as businesses and industries.

Code	Title and Definition

13. Education

Instructional programs that describe the art or processes of imparting knowledge, developing the powers of reasoning and judgement, and preparing others intellectually for a more mature life.

14. Engineering

Instructional programs that describe the mathematical and natural sciences when gained by study, experience, and practice and then applied with judgement in order to develop ways to economically utilize the materials and forces of nature for the benefit of mankind.

15. Engineering and Engineering-Related Technologies

Instructional programs that prepare individuals to support and assist engineers and other related professionals. Programs that stress specialized, practical knowledge related to the mathematical, scientific, or technical aspects of engineering and related sciences.

16. Foreign Languages

Programs that describe the structure and use of language that is common or indigenous to people of the same community or nation, the same geographical area, or the same cultural traditions; including such features as sounds, literature, syntax, phonology, morphology, semantics, sentences, prose, and verse, as well as the development of skills and attitudes used in communicating and evaluating thoughts and feelings through the use of oral and written language.

17. Allied Health

Programs that prepare individuals to assist qualified health professionals in providing diagnostic, therapeutic, preventative, restorative, and rehabilitative services to patients in health care facilities, in the home, and in the community.

18. Health Sciences

Programs that describe the restoration or preservation of health through the use of drugs, surgical operations, manipulations, or other curative or remedial methods.

19. Home Economics

Programs that describe the relationship between the physical, social, emotional, and intellectual environment in, and of, the home and family and the development of individuals. Includes instruction in the natural and social sciences and humanities in the development of attitudes, knowledge, and abilities pertaining to clothing and textiles, consumer education, food and nutrition, home management, housing, human development and family studies, and institutional management.

Code	Title and Definition

20. Vocational Home Economics

Programs that emphasize the acquisition of competencies (including skills and job attitudes) needed for securing and holding paid employment at the entry and advanced levels, and/or preparing for advancement in occupations utilizing home economics education knowledge and skills. Vocational home economics education instruction programs are developed from home economics subject matter areas in order to meet the unique requirements of specific vocations. Such programs include: (1) services to individuals/families; (2) assistance to professional home economists and professional in fields related to home economics in industry, business, and public and private agencies; and (3) other services and/or assistance directly related to one or more of the home economics subject matter areas, offered in formal and/or informal settings combined with supervised laboratory and work experiences.

21. Industrial Arts

Programs that provide individuals with knowledge that: (a) pertains to a body of related subject matter, or related courses, that has been organized for the development of understanding about all aspects of industry and technology, including learning experiences involving activities such as experimenting, designating, constructing, evaluating, and using tools, machines, and processes; and that (b) assists individuals in making informed and meaningful occupational choices or which prepares them for entry into advanced trade and industrial or technical educational programs.

22. Law

Programs that describe the principles and procedures, in the form of legislation, decisions, regulations, and orders, that have been developed and enforced by institutions of government in order to maintain social order.

23. Letters

Programs that describe sounds, literature, syntax, phonology, morphology, semantics, sentences, prose, and verse, as well as develop skills and attitudes used in communicating and evaluating thought and feelings through oral and written language.

24. Liberal/General Studies

Programs that describe the foundation necessary for understanding self and society through an appreciation of the concerns of civilization and our common heritage.

Code	Title and Definition

25. Library and Archival Sciences

Programs that describe the knowledge and skills required to develop, organize, store, retrieve, administer, and facilitate the use of collections of information in such formats as books, documents, manuscripts, machine-readable data bases, filmed and recorded materials, specimens, and artifacts.

26. Life Sciences

Programs that describe the systematic study of living organisms.

27. Mathematics

Programs that describe the sciences of logical symbolic languages and their application.

28. Military Sciences

Programs that describe the causative factors and tactical principles of warfare, armed conflict, and defense.

29. Military Technologies

Programs that prepare individuals to undertake the broad range of technical tasks required to keep the armed forces combat ready. Programs stress specialized, practical knowledge related to the mechnical, scientific, or technical aspects of military science in a variety of areas such as military communications and weapons systems.

30. Multi/Interdisciplinary Studies

Programs whose components derive from two or more separate conventional academic instructional programs.

31. Parks and Recreation

Programs that describe the principles and procedures of providing parks and recreational facilities and services for the benefit of the general public.

32. Basic Skills

Programs that describe the fundamental skills a person is normally thought to need in order to function productively in society. (This code is not applicable to the higher education degree programs of this report).

33. Citizenship/Civic Activities

Programs that describe how individuals can facilitate governmental functions and contribute to the well-being of their community through civic action. (This code is not applicable to the higher education degree programs of this report).

Code	Title and Definition

34. Health-Related Activities

Programs that describe the promotion of the health of individuals. (This code is not applicable to the higher education degree programs of this report).

35. Interpersonal Skills

Programs that describe how to effectively live and interact with others, social organization, being a congenial friend and companion, establishing courses of action for others, and influencing others to follow. (This code is not applicable to the higher education degree programs of this report).

36. Leisure and Recreational Activities

Programs that describe the development of and appreciation for, and competency in recreational and leisure-related activities. (This code is not applicable to the higher education degree programs of this report).

37. Personal Awareness

Programs that describe a person's self-perception, values, attitudes, beliefs, and emotional responses. (This code is not applicable to the higher education degree programs of this report).

38. Philosophy and Religion

Programs that describe the critical examination of the categories for describing reality, the nature and contents of human experience, the methodology of rational inquiry and criteria of practice (Philosophy); and the investigation of organized forms, beliefs, and practices related to eternal principles or transcendent spiritual entities (Religion).

39. Theology

Programs that describe the practice and application of theological principles and procedures as they apply to the planning, managing, and organizing of religious activities.

40. Physical Sciences

Programs that describe inanimate objects, processes of matter, energy, and associated phenomena.

41. Science Technologies

Programs that prepare individuals to support and assist various scientists and engineers. Programs that stress specialized, practical knowledge related to the mechanical, mathematical, scientific, or technical aspects of various biological, physical, and nuclear sciences.

Code	Title and Definition
42.	Psychology
	Programs that describe the behavior and experience of people.
43.	Protective Services
	Programs that describe the principles and procedures for providing police, fire, and other safety services, and for managing penal institutions.
44.	Public Affairs
	Programs that describe the formulation, implementation, administration, evaluation, and management of public policies and programs, including those services which are directed toward the betterment of economic and social conditions.
45.	Social Sciences
	Programs that describe the substantive portions of behavior, past and present activities, interactions, and organizations of people associated together for religious, benevolent cultural, scientific, political, patriotic, or other purposes.
46.	Construction Trades
	Programs that prepare individuals to erect, install, maintain, and repair buildings, highways, airports, missile sites, and other structures using materials such as metal, wood, stone, brick, glass, concrete, and composition substances. Includes instruction in cost estimating, cutting, fastening, and fitting of various materials; in the use of hand and power tools; and in the following of technical specifications and blueprints.
47.	Mechanics and Repairers
	Programs that prepare individuals in the adjustment, maintenance, part replacement, and repair of tools, equipment, and machines.
48.	Precision Production
	Programs that prepare individuals to produce precision goods and materials by hand or machine. In many instances, instructional activities are designed to cultivate an ability to interpret detailed instructions and specifications, and to produce or manufacture goods at low levels of tolerance, i.e., with very little error or variability.
49.	Transportation and Material Moving
	Programs that prepare individuals to operate and to control equipment used to facilitate the movement of people or materials.

Code	Title and Definition
50.	Visual and Performing Arts

Programs that describe the creation and perception of auditory, kinesthetic, and visual phenomena which express ideas and emotions in various forms, subject to aesthetic criteria.

APPENDIX B

POSTGRADUATE ACTIVITY TABLES AVAILABLE ONLY UPON REQUEST[1]

Appendix Table	Title
1.1	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Associate Degree Graduates in Pennsylvania, 1983.
1.2	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Baccalaureate Degree Graduates in Pennsylvania, 1983.
1.3	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Master's Degree Graduates in Pennsylvania, 1983.
1.4	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Doctoral Degree Graduates in Pennsylvania, 1983.
1.5	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of First-Professional Degree Graduates in Pennsylvania, 1983.
2.1A	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Associated Degree Recipients From Reporting State System Institutions in Pennsylvania, 1983.
2.1B	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Baccalaureate Degree Recipients From Reporting State System Institutions in Pennsylvania, 1983.
2.1C	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Master's Degree Recipients From Reporting State System Institutions in Pennsylvania, 1983.
2.1D	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Doctoral Degree Recipients From Reporting State System Institutions in Pennsylvania, 1983.

[1]Equivalent versions of Appendix Tables 1.1 through 2.4C are also available at the six-digit level of analysis but it should be remembered that the number of reported graduates for a given degree field would be even smaller than that found at the four-digit level of analysis making the reliability and sampling adequacy of the results even more problematic.

Appendix Table	Title
2.2A	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Associate Degree Recipients From Reporting State-Related Institutions in Pennsylvania, 1983.
2.2B	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Baccalaureate Degree Recipients From Reporting State-Related Institutions in Pennsylvania, 1983.
2.2C	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Master's Degree Recipients From Reporting State-Related Institutions in Pennsylvania, 1983.
2.2D	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Doctoral Degree Recipients From Reporting State-Related Institutions in Pennsylvania, 1983.
2.2E	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of First-Professional Degree Recipients From Reporting State-Related Institutions in Pennsylvania, 1983.
2.3A	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Associate Degree Recipients From Reporting State-Aided Institutions in Pennsylvania, 1983.
2.3B	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Baccalaureate Degree Recipients From Reporting State-Aided Institutions in Pennsylvania, 1983.
2.3C	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Master's Degree Recipients From Reporting State-Aided Institutions in Pennsylvania, 1983.
2.3D	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Doctoral Degree Recipients From Reporting State-Aided Institutions in Pennsylvania, 1983.
2.3E	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of First-Professional Degree Recipients From Reporting State-Aided Institutions in Pennsylvania, 1983.
2.4A	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Associate Degree Recipients From Reporting Private Institutions in Pennsylvania, 1983.

Appendix Table	Title
2.4B	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Baccalaureate Degree Recipients From Reporting Private Institutions in Pennsylvania, 1983.
2.4C	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Master's Degree Recipients From Reporting Private Institutions in Pennsylvania, 1983.
2.4D	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Doctoral Degree Recipients From Reporting Private Institutions in Pennsylvania, 1983.
2.4E	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of First-Professional Degree Recipients From Reporting Private Institutions in Pennsylvania, 1983.
2.5A	(This Table is not available for the Associate Degree Graduates of 1983 since there were no reporting Junior Colleges in 1983)
2.6	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Associate Degree Recipients From Reporting Community Colleges, 1983.
2.7	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Associate Degree Recipients From Reporting Proprietary Schools in Pennsylvania, 1983.
2.8	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Status of Associate Degree Recipients From the State School of Technology (Thaddeus Stevens) in Pennsylvania, 1983.